

SPLIT SYSTEM**Air Conditioners**

English

Deutsch

Français

Español

Italiano

Ελληνικά

Nederlands

Português

Русский

Türkçe

MODELS
(Wall mounted type)

FAQ71CVEB
FAQ100CVEB

CAREFULLY READ THESE INSTRUCTIONS BEFORE INSTALLATION.
KEEP THIS MANUAL IN A HANDY PLACE FOR FUTURE REFERENCE.

LESEN SIE DIESE HINWEISE VOR DER INSTALLATION SORGFÄLTIG DURCH.
BEWAHREN SIE DIESE ANLEITUNG AN EINEM LEICHT ZUGÄNGLICHEN ORT FÜR
SPÄTERES NACHSCHLAGEN AUF.

VEUILLEZ LIRE ATTENTIVEMENT CES INSTRUCTIONS AVANT L'INSTALLATION.
CONSERVEZ CE MANUEL EN LIEU SÛR POUR POUVOIR VOUS Y REPORTER
ULTÉRIEUREMENT.

LEA DETENIDAMENTE ESTAS INSTRUCCIONES ANTES DE LA INSTALACIÓN.
CONSERVE ESTE MANUAL PARA POSIBLES CONSULTAS FUTURAS.

PRIMA DELL'INSTALLAZIONE, LEGGERE ATTENTAMENTE LE PRESENTI ISTRUZIONI.
CONSERVARE IL PRESENTE MANUALE IN UN LUOGO FACILMENTE ACCESSIBILE PER
RIFERIMENTO FUTURO.

ΔΙΑΒΑΣΤΕ ΠΡΟΣΕΚΤΙΚΑ ΑΥΤΕΣ ΤΙΣ ΟΔΗΓΙΕΣ ΠΡΙΝ ΤΗΝ ΕΓΚΑΤΑΣΤΑΣΗ.
ΦΥΛΑΞΤΕ ΑΥΤΟ ΤΟ ΕΓΧΕΙΡΙΔΙΟ ΣΕ ΒΟΛΙΚΟ ΜΕΡΟΣ ΓΙΑ ΜΕΛΛΟΝΤΙΚΗ ΑΝΑΦΟΡΑ.

LEES DEZE INSTRUCTIES ZOGVULDIG DOOR VOORDAT MET DE INSTALLATIE WORDT
BEGONNEN.

BEWAAR DEZE HANDLEIDING VOOR TOEKOMSTIG GEBRUIK OP EEN GESCHIKTE
PLAATS ONDER HANDBEREIK.

LEIA ATENTAMENTE ESTAS INSTRUÇÕES ANTES DA INSTALAÇÃO.
MANTENHA ESTE MANUAL NUM LOCAL DE FÁCIL ACESSO PARA CONSULTA.

ПЕРЕД УСТАНОВКОЙ ВНИМАТЕЛЬНО ПРОЧИТАЙТЕ ДАННЫЕ ИНСТРУКЦИИ.
ХРАНИТЕ ДАННОЕ РУКОВОДСТВО В ЛЕГКО ДОСТУПНОМ МЕСТЕ ДЛЯ ЕГО
ПОСЛЕДУЮЩЕГО ИСПОЛЬЗОВАНИЯ.

MONTAJDAN ÖNCE BU YÖNERGELERİ DİKKATLİCE OKUYUN.
GELECEKTE BAŞVURMAK ÜZERE BU ELKİTABINI KOLAY ULAŞABİLECEĞİNİZ BİR YERDE
MUHAFAZA EDİN.

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The original instructions are written in English. All other languages are translations of the original instructions.

1. SAFETY PRECAUTIONS

Be sure to follow this “SAFETY PRECAUTIONS”.

This product comes under the term “appliances not accessible to the general public”.

This manual classifies the precautions into WARNINGS and CAUTIONS.

Be sure to follow all the precautions below: They are all important for ensuring safety.

 **WARNING** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

 **CAUTION** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
It may also be used to alert against unsafe practices.

After the installation is completed, test the air conditioner and check if the air conditioner operates properly. Give the user adequate instructions concerning the use and cleaning of the indoor unit according to the Operation Manual. Ask the user to keep this manual and the Operation Manual together in a handy place for future reference.

 **WARNING**

- Ask your local dealer or qualified personnel to carry out installation work.
Improper installation may result in water leakage, electric shocks or a fire.
- Perform installation work in accordance with this installation manual.
Improper installation may result in water leakage, electric shocks or a fire.
- Consult your dealer regarding what to do in case of refrigerant leakage.
When the air conditioner is installed in a small room, it is necessary to take proper measures so that the amount of any leaked refrigerant does not exceed the concentration limit in the event of a leakage.
Otherwise, this may lead to an accident due to oxygen deficiency.

- Be sure to use only the specified parts and accessories for installation work.
Failure to use the specified parts may result in the air conditioner falling down, water leakage, electric shocks, a fire, etc.
- Install the air conditioner on a foundation that can withstand its mass.
Insufficient strength may result in the air conditioner falling down and causing injury.
In addition, it may lead to vibration of indoor units and cause unpleasant chattering noise.
- Carry out the specified installation work in consideration of strong winds, typhoons, or earthquakes.
Improper installation may result in an accident such as air conditioner falling.
- Make certain that all electrical work is carried out by qualified personnel according to the applicable legislation (note 1) and this installation manual, using a separate circuit.
In addition, even if the wiring is short, make sure to use a wiring that has sufficient length and never connect additional wiring to make the length sufficient.
Insufficient capacity of the power supply circuit or improper electrical construction may lead to electric shocks or a fire.
(note 1) applicable legislation means “All international, national and local directives, laws, regulations and/or codes which are relevant and applicable for a certain product or domain”.
- Earth the air conditioner.
Do not connect the earth wiring to gas or water piping, lightning conductor or telephone earth wiring.
Incomplete earthing may cause electric shocks or a fire.
- Be sure to install an earth leakage breaker.
Failure to do so may cause electric shocks and a fire.
- Disconnect the power supply before touching the electric components.
If you touch the live part, you may get an electric shocks.
- Make sure that all wiring is secure, using the specified wirings and ensuring that external forces do not act on the terminal connections or wirings.
Incomplete connection or fixing may cause an overheat or a fire.
- When wiring between the indoor and outdoor units, and wiring the power supply, form the wirings orderly so that the control box lid can be securely fastened.
If the control box lid is not in place, overheat of the terminals, electric shocks or a fire may be caused.
- If refrigerant gas leaks during installation work, ventilate the area immediately.
Toxic gas may be produced if refrigerant gas comes into contact with a fire.
- After completing the installation work, check to make sure that there is no leakage of refrigerant gas.
Toxic gas may be produced if refrigerant gas leaks into the room and comes into contact with a source of a fire, such as a fan heater, stove or cooker.
- Never directly touch any accidental leaking refrigerant. This could result in severe wounds caused by frostbite.



CAUTION

- Install drain piping according to this installation manual to ensure good drainage, and insulate the piping to prevent condensation.
Improper drain piping may cause water leakage, make the furniture get wet.
 - Install the air conditioner, power supply wiring, remote controller wiring and transmission wiring at least 1 meter away from televisions or radios to prevent image interference or noise.
(Depending on the radio waves, a distance of 1 meter may not be sufficient to eliminate the noise.)
 - Install the indoor unit as far as possible from fluorescent lamps.
If a wireless remote controller kit is installed, the transmission distance may be shorter in a room where an electronic lighting type (inverter or rapid start type) fluorescent lamp is installed.
 - Do not install the air conditioner in places such as the following:
 1. Where there is mist of oil, oil spray or vapour for example a kitchen.
Resin parts may deteriorate, and cause them to fall out or water to leak.
 2. Where corrosive gas, such as sulfurous acid gas, is produced.
Corrosion of copper pipings or brazed parts may cause the refrigerant to leak.
 3. Where there is machinery which emits electromagnetic waves.
Electromagnetic waves may disturb the control system, and cause malfunction of the equipment.
 4. Where flammable gases may leak, where carbon fibre or ignitable dust is suspended in the air or where volatile flammables, such as thinner or gasoline, are handled.
If the gas should leak and remained around the air conditioner, it may cause ignition.
 - The air conditioner is not intended for use in a potentially explosive atmosphere.
-

2. BEFORE INSTALLATION

Do not exert pressure on the resin parts when opening the unit or when moving it after opening. Be sure to check in advance that the refrigerant to be used for installation is R410A. (If a wrong refrigerant is charged, the unit will not properly operate.)

- For the installation of the outdoor unit, refer to the installation manual attached to the outdoor unit.
- Do not dispose of any parts necessary for installation until the installation is completed.
- In order to protect the indoor unit from damage, use packing materials to protect the unit after carrying until the installation starts.
- Decide the route for carrying the unit to the installation site.
- Leave the unit inside its packaging while moving, until reaching the installation site. If the unit needs to be unpacked before moving, be careful not to damage the unit.

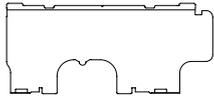
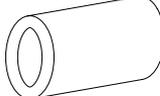
2-1 PRECAUTIONS

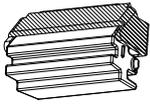
- Be sure to read this manual before installing the indoor unit.
- This unit is suitable for installation in a household, commercial and light industrial environment.
- Do not use the unit in locations where the salt content in the air is high such as beachfront, or where the voltage fluctuates such as factories, or where the base vibrates such as automobiles or marine vessels.

2-2 ACCESSORIES

Check the following accessories are included with the unit.

(Do not dispose of any parts necessary for installation until the installation is completed.)

Name	(1) Installation panel	(2) Attachment screws for the installation panel	(3) Insulating tape	(4) Clamp
Quantity	1 set	9 pcs.	1 pc.	1 large 3 small
Shape		 M4 × 25L		

Name	(5) Securing screws	(6) Screw cover	(Other) • Operation manual • Installation manual
Quantity	2 pcs. (3 pcs. for 100 type)	3 pcs. (for 100 type only)	
Shape	 M4 × 12L		

2-3 OPTIONAL ACCESSORIES

- The optional remote controller is required for this indoor unit.
(However, the remote controller is not required for the slave unit of a simultaneous operation system.)
- These are two types of remote controllers: wired and wireless. Select a remote controller from Table 1 according to customer request and install in an appropriate place.
(For installation, follow the installation manual included with the remote controllers.)

Table 1

Remote controller		Model
Wired type		BRC1E type BRC1D type
Wireless type	Heat pump type	BRC7EB518
	Cooling only type	BRC7EB519

NOTE

- If the customer wishes to use a remote controller that is not listed above, select a suitable remote controller after consulting catalogs and technical guide.

FOR THE FOLLOWING ITEMS, TAKE SPECIAL CARE DURING CONSTRUCTION AND CHECK AFTER INSTALLATION IS FINISHED.

1. Items to be checked after completion of work

Items to be checked	If not properly done, what is likely to occur	Check
Are the indoor unit and outdoor unit fixed firmly?	The unit may drop, vibrate or make noise.	
Is the installation of the indoor unit and the outdoor unit completed?	The unit may malfunction or the components may burn out.	
Is the gas leak test finished?	It may result in insufficient cooling or heating.	
Is the unit fully insulated? (Refrigerant piping, drain piping)	Condensate water may drip.	
Does drainage flow smoothly?	Condensate water may drip.	
Does the power supply voltage correspond to that shown on the name plate?	The unit may malfunction or the components may burn out.	
Are wiring and piping correct?	The unit may malfunction or the components may burn out.	
Is the unit safely grounded?	It may result in electric shock.	
Is wiring size according to specifications?	The unit may malfunction or the components may burn out.	
Is something blocking the air outlet or inlet of either the indoor or outdoor units?	It may result in insufficient cooling or heating. (This can lead to malfunction or decreased performance due to decreased air volume.)	
Are refrigerant piping length and additional refrigerant charge noted down?	The refrigerant charge in the system is not clear.	

2. Items to be checked at time of delivery to customer *Also review the “1. SAFETY PRECAUTIONS”

Items to be checked	Check
Has the field setting done (as necessary)?	
Did you attach the control box lid, the air filter, and suction grille?	
Does the cold air (warm air) blow properly during the cooling (heating) operation?	
Did you explain about operations while showing the operation manual to your customer?	
Did you explain the cooling, heating, dry, and automatic cooling/heating operations described in the operation manual?	
Did you explain what the set airflow rate is when setting the airflow rate at thermostat off to the customer?	
Is the emergency switch (EMG.) of the printed circuit board turned ON? At delivery from the factory, it is set to normal (NORM).	
Did you hand the operation manual over to your customer? (Please hand over the installation manual as well.)	

Points for explanation about operations

Since the items with **⚠ WARNING** and **⚠ CAUTION** marks in the operation manual, if not observed, may cause injuries and/or material damages. Therefore, in addition to the general usage, it is necessary to explain them to the customer and also to ask the customers to thoroughly read them. Accordingly, it is necessary that you make a full explanation about the described contents and also ask your customers to read the operation manual.

2-4 NOTE TO THE INSTALLER

Be sure to instruct customers how to properly operate the unit (especially cleaning filters, operating different functions, and adjusting the temperature) by having them carry out operations by themselves while reading the manual literally.

3. SELECTING INSTALLATION SITE

Do not exert pressure on the resin parts when opening the unit or when moving it after opening.

(1) Select an installation site where the following conditions are fulfilled and that meets with your customer's approval.

- In the upper space (including the back of the ceiling) of the indoor unit where there is no possible dripping of water from the refrigerant pipe, drain pipe, water pipe, etc.
- Where optimum air distribution can be ensured.
- Where the wall is strong enough to bear the weight of the indoor unit.
- Where the wall is not significantly tilted.
- Where nothing blocks the air passage.
- Where sufficient clearance for installation and maintenance can be ensured.
(Refer to Fig. 1 and Fig. 2)
- Where condensate can be properly drained.
- Where pipe between indoor and outdoor units is possible within the allowable limit.
(Refer to the installation manual of the outdoor unit.)
- Where not exposed to combustible gases.
- Install the indoor unit no less than 2.5 m above the floor. Where unavoidably lower, take what measures are necessary to keep hands out of the air inlet.

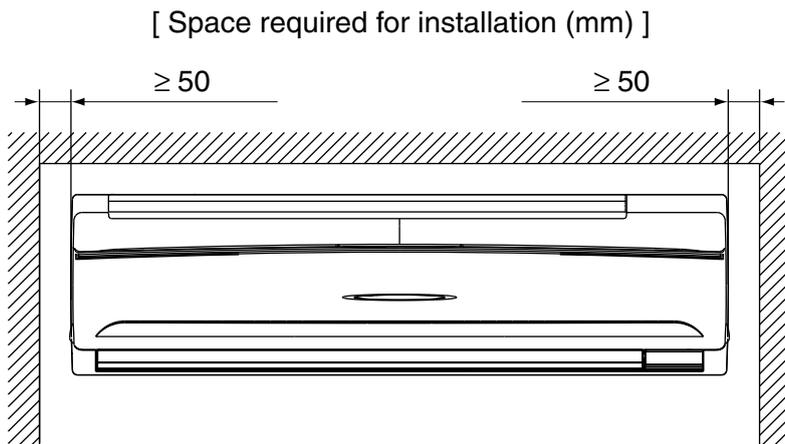


Fig. 1

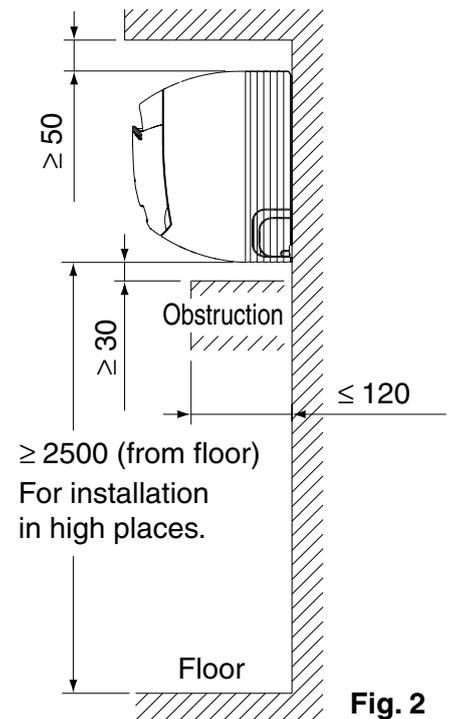


Fig. 2

⚠ CAUTION

- Install the indoor and outdoor units, power cord and connecting wires at least 1 meter away from televisions or radios to prevent picture interference and noise.
(Depending on the incoming signal strength, a distance of 1 meter may not be sufficient to eliminate noise.)
- Install the indoor unit as far as possible from fluorescent lamps.
If a wireless kit is installed in a room where the electronic lighting type (inverter or rapid start types) fluorescent lamps exist, the transmitting distance of a remote controller may be shorter.
- The sound pressure level is less than 70 dBA.

- (2) Investigate whether the installation location (such as the floor and wall) can bear the weight of the unit and, if necessary, reinforce the location with such as boards and beams before installation. To avoid vibration and abnormal noise, reinforce the location before installation.
- (3) The indoor unit may not be directly installed on the wall. Use the attached installation panel (1) before installing the unit.

4. PREPARATION BEFORE INSTALLATION

- (1) Remove the installation panel (1) from the unit, and then attach it to the wall.
(The installation panel is temporarily attached to the indoor unit with screws (for 100 type only).)
(Refer to Fig. 3)
 - (a) Check the place for a hole for securing the installation panel (1).
 - Choose a place so that there is a gap (50 mm or more) between the ceiling and the main unit.
 - (b) Temporarily attach the installation panel (1) at the temporary-securing position using the hole, and use a level to make sure the panel is either level or its drain hose side is tilted slightly downward.
 - (c) Secure the installation panel (1) to the wall using the attachment screws for the installation panel (2) or bolts.
 - If using bolts, attach the panel with a M8 or M10 bolt on both sides (for a total of 2 bolts).
 - If dealing with concrete, use commercially available foundation bolts (M8 or M10).
- (2) Open the through-hole for the piping.
 - The refrigerant pipe and drain pipe can be passed out in one of 6 directions: left, bottom-left, back-left, right, bottom-right, or back-right. (Refer to Fig. 4)
 - Referring to the punch mark on the installation panel (1), choose where to pass the piping out and open a through-hole ($\phi 80$) in the wall.
Open the hole so that there is a downward slope for the drain piping.
(Refer to “7. DRAIN PIPING WORK”.)
- (3) If using the left, bottom-left, right, or bottom-right positions for piping, cut out the through-hole for the piping in the front grille using such as a box cutter. (Refer to Fig. 5)

Installation panel (1) (accessory)

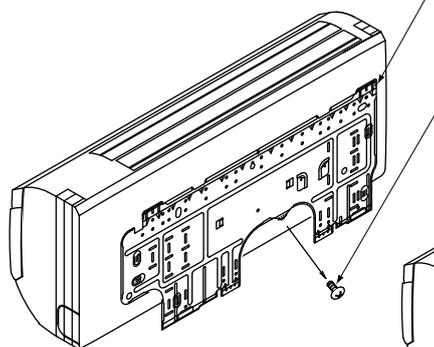


Fig. 3

Temporary-securing screw

(For the 71 class, the installation panel (1) is not temporarily attached to the unit.)

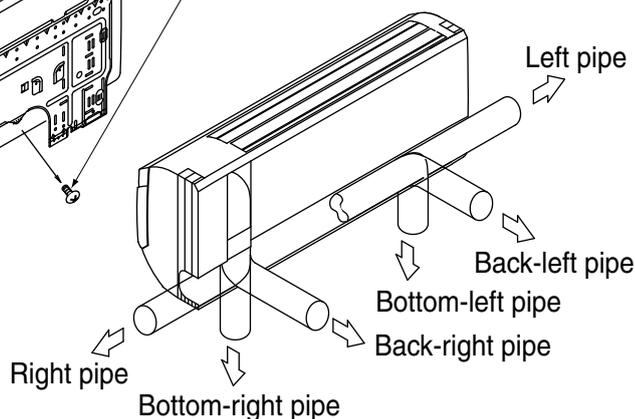


Fig. 4

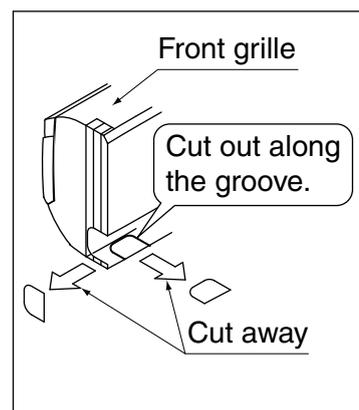


Fig. 5

5. INDOOR UNIT INSTALLATION

As for the parts to be used for installation, be sure to use the attached accessories and the specified parts.

⚠ CAUTION

- Install so that the unit does not tilt to either side or forward. (Applying an excessive force to the drain hose can cause water leakage.)
- Do not hold the unit by the horizontal flaps when lifting it. (This may damage the horizontal flaps.)

(1) Remove the front panel and the control box lid. (Refer to Fig. 6)

< How to remove the front panel and control box lid >

- (1) Open the front panel to the point where it stops.
- (2) Push the axes on either side of the front panel towards the center of the main unit and remove. (You can also remove it by sliding the front panel either to the left or right and pulling it forward.)
- (3) Remove the screw from the control box lid and pull the handle forward.

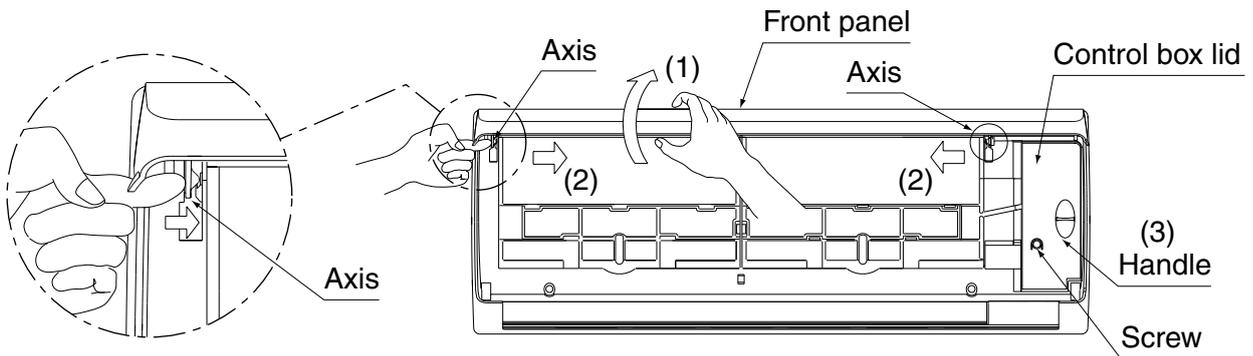


Fig. 6

(2) Point the pipe in the direction it will be passed out.

For right, bottom-right, and back-right piping (Refer to Fig. 7)

- Wrap the drain hose and the refrigerant piping together with the insulating tape (3) so that the drain hose is below the refrigerant piping.

For left, bottom-left, and left-back piping

- Remove the front grille. (Refer to Fig. 8)

< How to remove the front grille >

- (1) Remove the screws grille clamps and tabs securing the front grille.

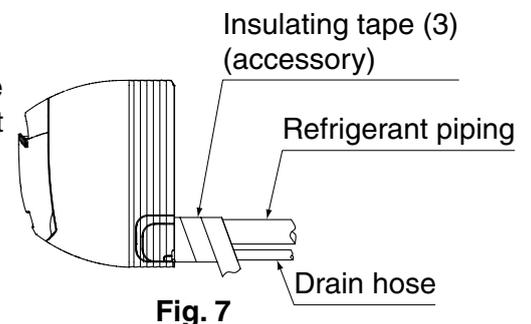


Fig. 7

(2) Remove the front grille.

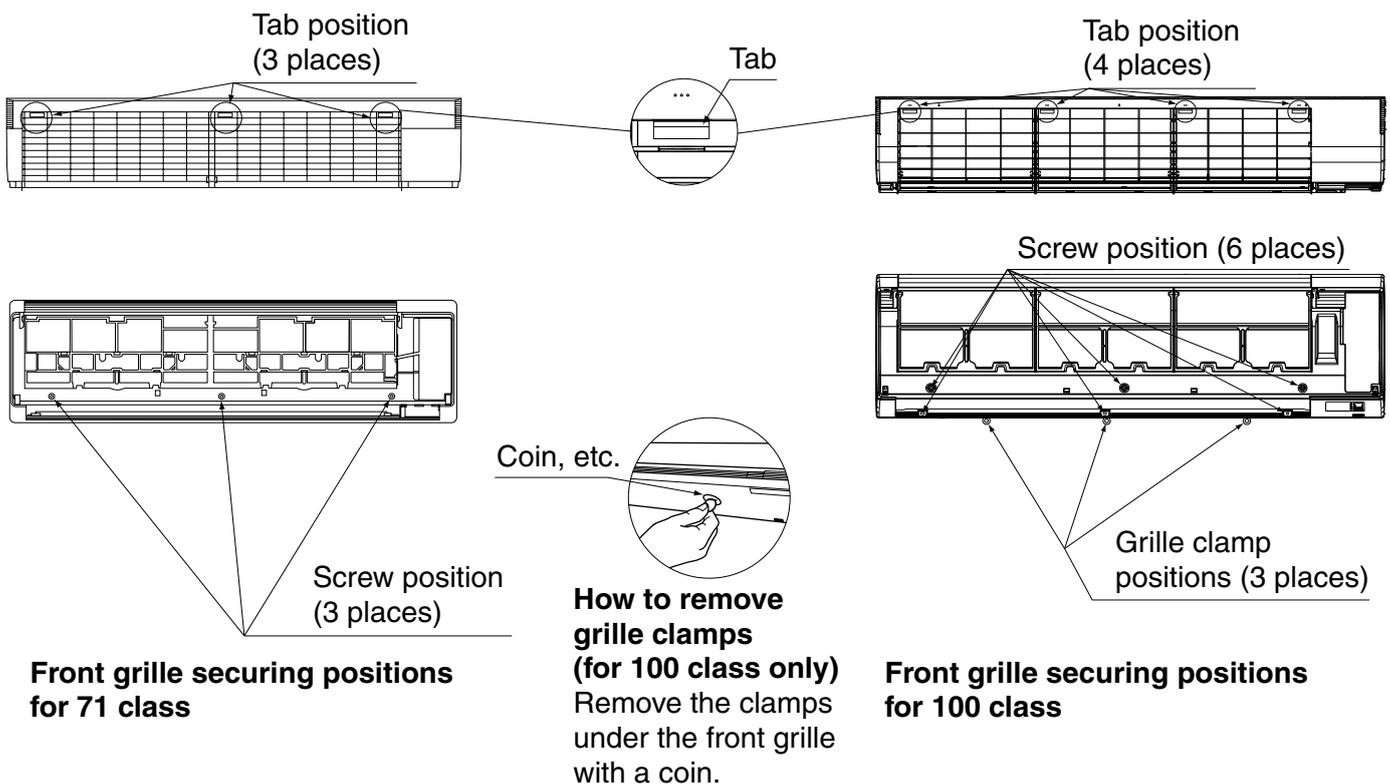
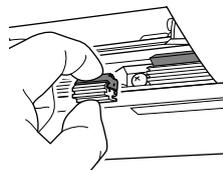


Fig. 8

< How to attach the front grille (for 100 class only) >

Attach the screw cover (6) provided with the air outlet. (3 places)



- Remove the drain plug, the insulation tubing, and the drain hose from the drain pan and replace. **(Refer to Fig. 9)**
- Mold the local refrigerant piping ahead of time, matching it to the liquid pipe and gas pipe marks engraved on the installation panel (1).

< Replacing the drain hose and drain plug >

- (1) Remove the drain plug and insulating tube.
- (2) Remove the drain hose installation screws, and pull out the drain hose.
- (3) Replace the drain plug and the insulating tube onto the right side.
- (4) Replace the drain hose onto the left side, and secure the hose with the installation screws.

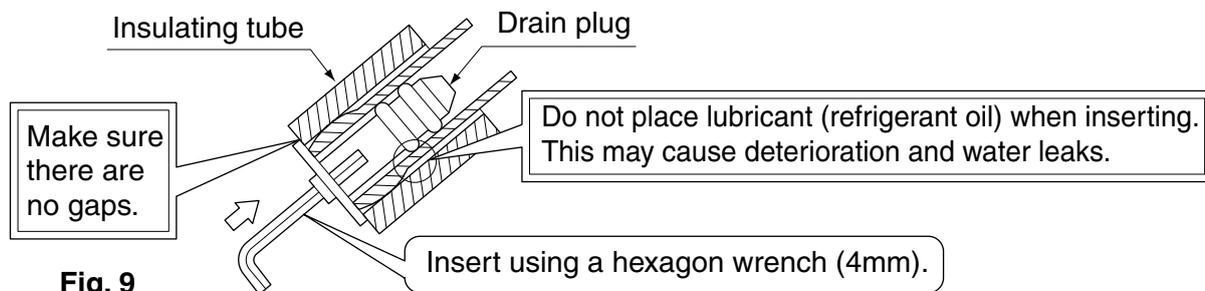
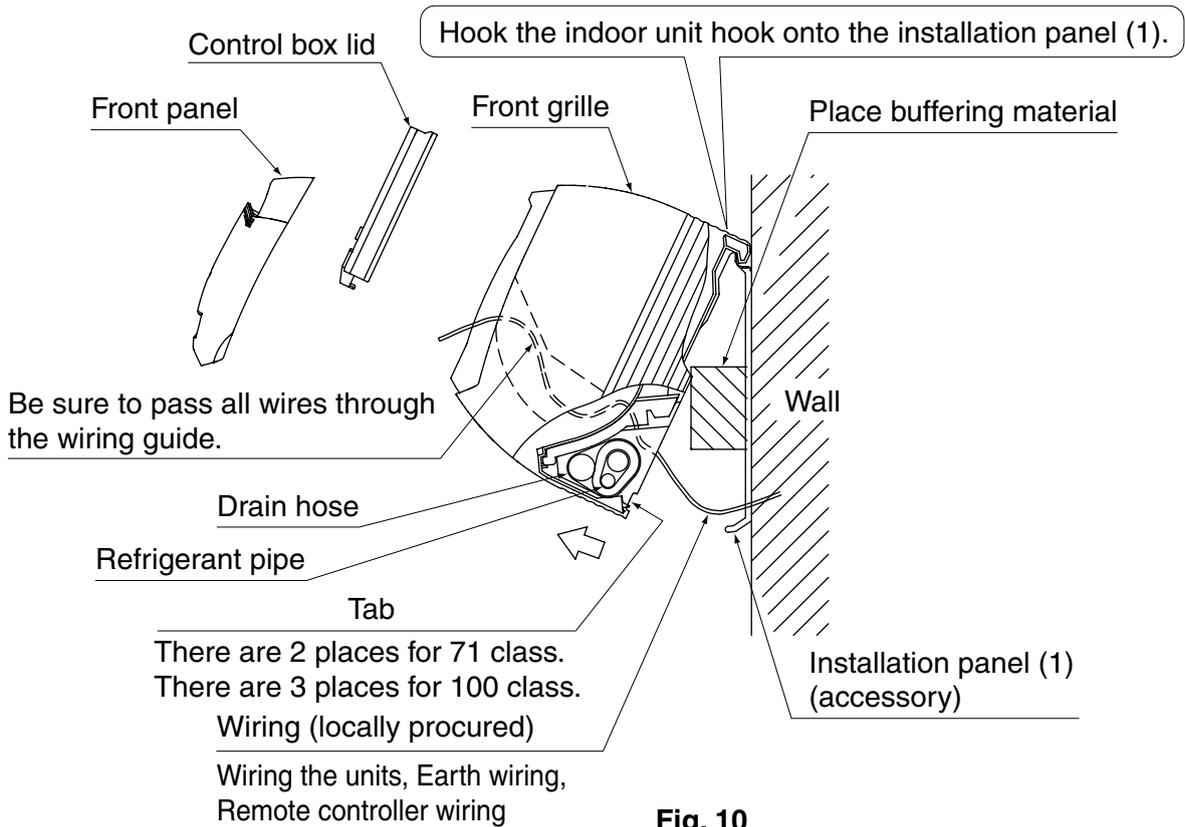


Fig. 9

If the drain hose is not replaced, water is likely to be accumulated inside the unit. The occurrence of slime may clog the hose and cause water leakage.

(3) Hook the indoor unit onto the installation panel. (Refer to Fig. 10)

- Placing buffering material between the wall and the indoor unit at this time will make work easier.



For right, bottom-right, and back-right piping

- Pass the drain hose and the refrigerant piping to the wall.

(4) Pass wiring the units, earth wiring, and remote controller wiring through the wiring guide in through the back of the indoor unit and to the front.

(5) Connect the piping. (Refer to “6. REFRIGERANT PIPING WORK” and Fig. 11)

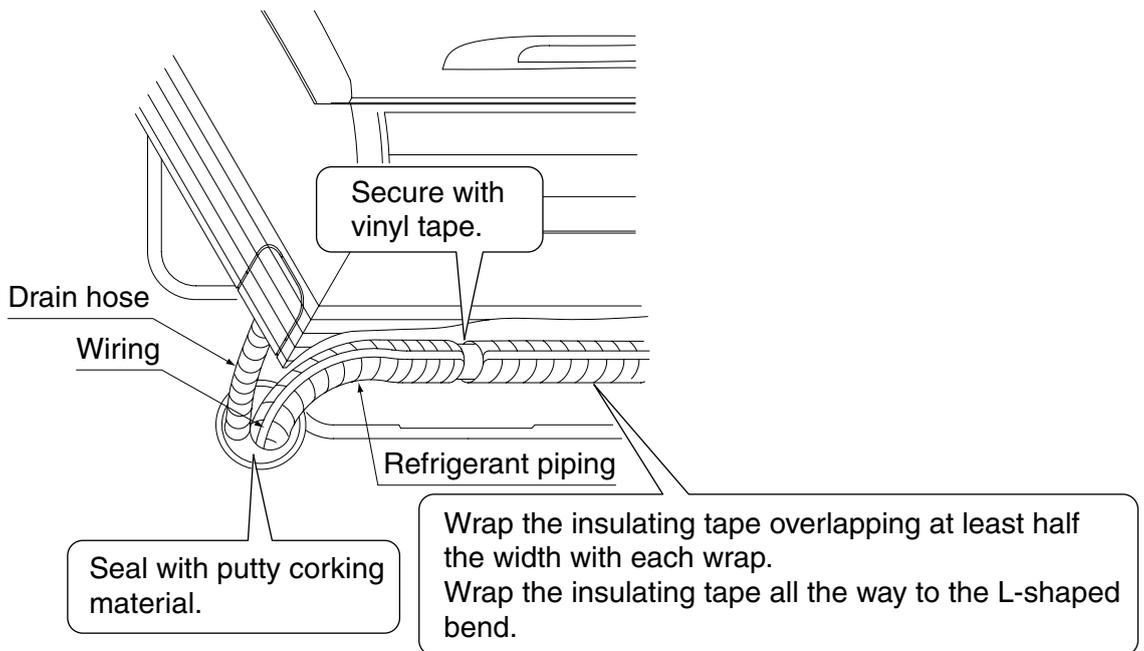


Fig. 11

- The electric wires such as the wiring between the units fix them on the refrigerant pipe with vinyl tape.
- Seal the piping through-hole with putty corking material.

(6) Push on both bottom edges of the indoor unit using both hands and hook the tab on the back of the indoor unit onto the installation panel (1). (Refer to Fig. 10)

- At this time remove the buffering material placed in step (3).
- Make sure wiring the units, earth wiring and remote controller wiring are not caught inside the indoor unit.

■ **When screwing in the indoor unit**

- Remove the front grille. (Refer to Fig. 8)
- Secure the indoor unit to the installation panel (1) with the securing screws (5). (Refer to Fig. 12)

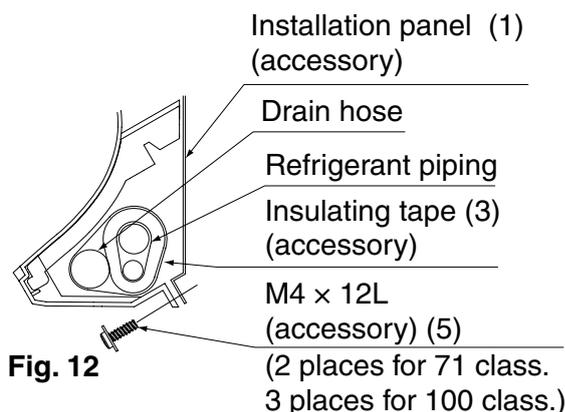


Fig. 12

6. REFRIGERANT PIPING WORK

⟨For refrigerant piping of outdoor units, see the installation manual attached to the outdoor unit.⟩

⟨Make sure to carry out thermal insulation in both gas and liquid piping. Incomplete insulation may result in water leakage. Thermal resistance of the insulation for gas piping must be 120°C or higher. In a high humidity environment, strengthen the refrigerant piping insulation. If insulation is insufficient, condensation may form on the insulation surface.⟩

Be sure to check that the refrigerant is R410A before starting the job. (If a different refrigerant is used, a normal operation cannot be carried out.))

— **⚠ CAUTION** —

This product is a dedicated model for new refrigerant (R410A). At installation, make sure to observe the following precaution.

- For flare connection, use dedicated pipe cutter and flaring tools for R410A.
- Apply ester oil or ether oil to the inside of the flare section before connecting.
- Use the flare nuts provided with the unit. Do not use a class 1 flare nut. Otherwise the refrigerant may leak.
- To prevent dust, moisture or other foreign matters from getting into the tube, either pinch the tube end or cover the end with tape.
- Do not allow anything other than the designated refrigerant to get mixed into the refrigerant circuit, such as air, etc. If any refrigerant gas leaks while working on the unit, ventilate the room thoroughly right away.

- The outdoor unit is charged with refrigerant.
- Be sure to use both a spanner and a torque wrench together as shown in the drawing, when connecting or disconnecting pipes to/from the unit. (Refer to Fig. 13)
- Refer to “Table 2” for the dimensions for flaring.
- When connecting the flare nut, apply ester oil or ether oil to the inside of flared section, and turn the nut spin 3-4 times by hand before screwing in. (Refer to Fig. 14)

— **⚠ CAUTION** —

- Be careful not to damage the flare section.

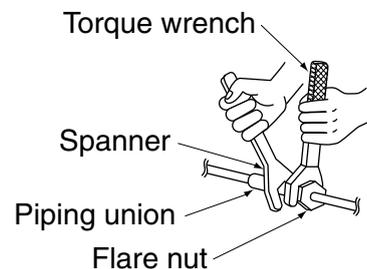


Fig. 13

Apply ester or ether oil to this face.

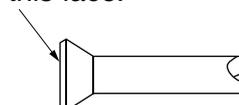


Fig. 14

Table 2

Pipe size	Tightening torque (N·m)	Flare dimensions A (mm)	Flare
φ 9.5 (3/8")	32.7-39.9	12.8 – 13.2	
φ15.9 (5/8")	61.8-75.4	19.3 – 19.7	

- Refer to “Table 2” to determine the proper tightening torque.

CAUTION

- Overtightening may damage the flare and cause a refrigerant leakage.

When you do not have a torque wrench, use Table 2 as a rule of thumb

When you keep on tightening the flare nut with a spanner, there is a point where the tightening torque suddenly increases.

From that point, further tighten and turn the flare nut the angle shown below. **(Refer to Table 3)**

After the work is finished, make sure to check that there is no leak.

Unless you tighten as instructed, (if it is loosely tightened), it may lead to the refrigerant leakage (slow leak) and cause malfunction of the device (such as insufficient cooling or heating).

Table 3

Pipe size	Further tightening angle	Recommended arm length of tool
φ 9.5 (3/8")	60 to 90 degrees	Approx. 200mm
φ15.9 (5/8")	30 to 60 degrees	Approx. 300mm

CAUTION

Be sure to insulate any field piping all the way to the piping connection inside the unit. Any exposed piping may cause condensation or burns if touched.

- After leakage check of piping connection is finished, carry out thermal insulation with the supplementary piping insulation tubing and insulating tape (3). The insulating tape (3) should be wrapped from the L-shaped bend all the way to the end inside the unit. **(Refer to Fig. 15)**

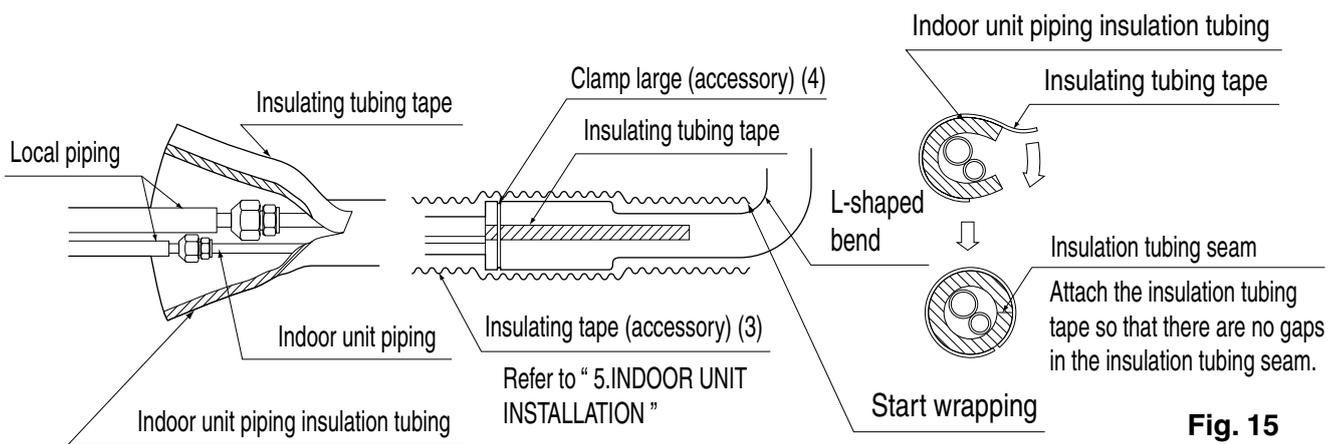


Fig. 15

- When brazing the refrigerant piping, only begin brazing after having carried out nitrogen substitution (NOTE 1) or while inserting nitrogen into the refrigerant piping (NOTE 2). Once this is completed, connect the indoor unit with flares.

NOTE

1. For the nitrogen exchange procedures, please refer to the Multi-split Type Series for Building installation manual (contact your Daikin dealer).
2. When brazing after having nitrogen flow through the pipe and substituting nitrogen for air, it is appropriate to set the nitrogen pressure to about 0.02MPa with a pressure reducing valve. **(Refer to Fig. 16)**

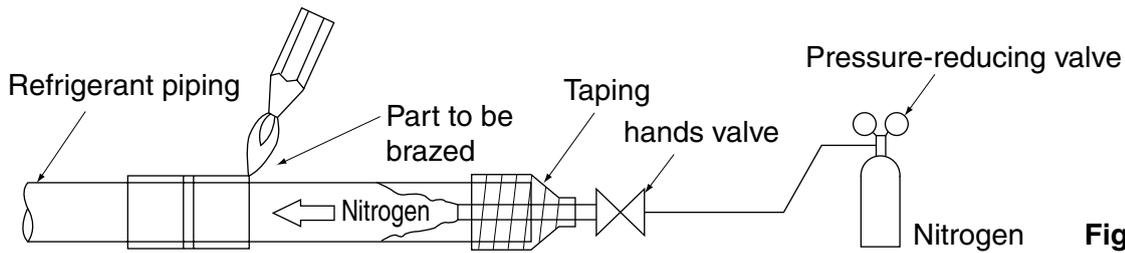


Fig. 16

3. Do not use flux when brazing refrigerant piping. Use the phosphor copper brazing filler metal (BCuP-2: JIS Z 3264/B-Cu93P-710/795: ISO 3677) that does not require flux. (Chlorine based flux is extremely harmful to refrigerant piping systems. It will corrode the refrigerant piping and if it contains fluorine it will deteriorate the refrigerating oil.)
4. When performing the leakage test for the indoor unit and inter-unit piping after the indoor unit is installed, be sure to refer to the installation manual for the indoor unit or technical guide for the leakage test pressure and the refrigerant piping installation.
5. Shortage of refrigerant due to air purge or forgetting the additional refrigerant charge may cause malfunction of the unit (does not sufficiently cool or heat).
For installation of refrigerant piping, be sure to refer to the installation manual for the outdoor unit or the technical guide.

CAUTION

- Do not use oxidation inhibitors or the like when brazing. (Residues may cause clogging of pipes or damage to parts.)

7. DRAIN PIPING WORK

(1) Install the drain piping. (Refer to Fig. 17)

Perform the drain piping work so that water drains properly.

- The drain piping should be short with a downward slope of 1/100 or more, and should prevent air pockets from forming. The drain hose which is indoor units should also have a downward slope.

CAUTION

- The drain pipe may be clogged if water accumulates in the drain pipe.
- Watch out for the points in the Fig. 17 when performing drain work.

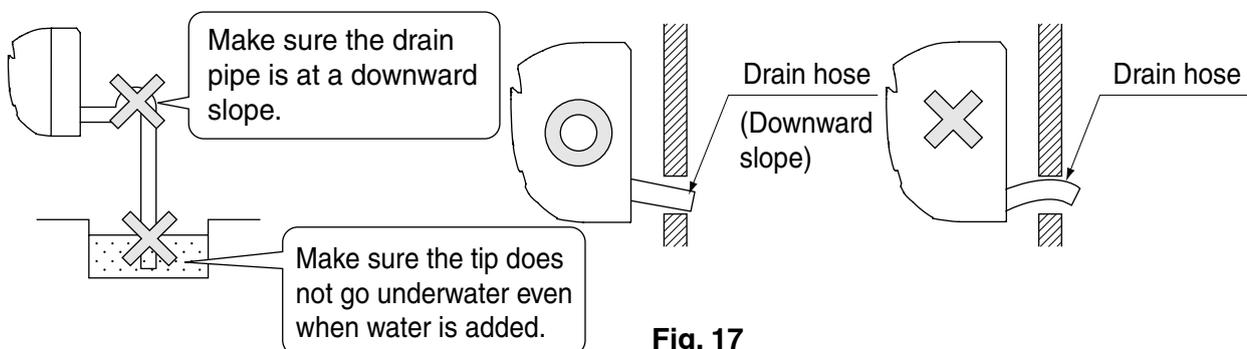
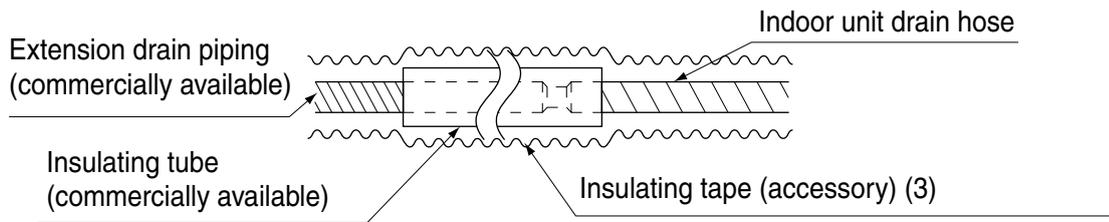


Fig. 17

- When extending the drain hose, use a commercially available drain extension hose, and be sure to insulate the extended section of the drain hose which is indoor units. **(Refer to Fig. 18)**



(Refer to “5. INDOOR UNIT INSTALLATION”) **Fig. 18**

- Make sure the diameter of the piping is the same as the piping (hard vinyl chloride, nominal diameter 13mm) or bigger.
- When directly connecting a hard vinyl chloride pipe joint (nominal diameter 13mm) to the drain hose connected to the indoor unit (i.e. for embedded piping, etc.), use a commercially available hard vinyl chloride pipe joint (nominal diameter 13mm). **(Refer to Fig. 19)**

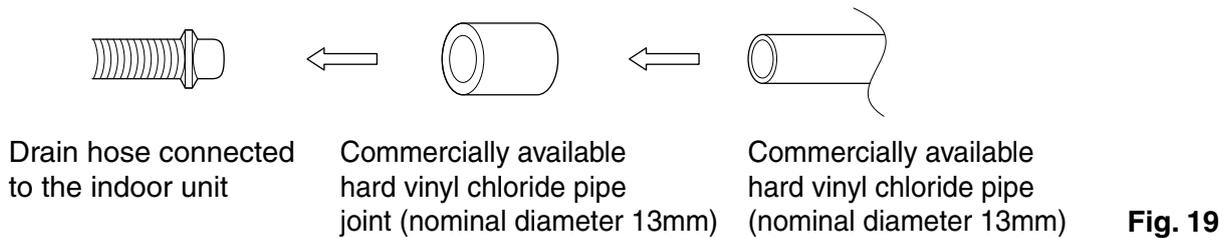


Fig. 19

CAUTION

- Do not bend or twist the drain hose connected to the indoor unit to avoid applying an excessive force. (Applying an excessive force to the drain hose can cause water leakage.)
- When installing the separately provided drain up kit, please refer to the installation manual provided with the drain up kit.

(2) Make sure the drain works properly.

- After drain piping work is complete, perform a drain check by opening the front panel, **removing the air filter**, pouring water into the drain pan, and making sure water flows smoothly out of the drain hose. **(Refer to Fig. 20)**

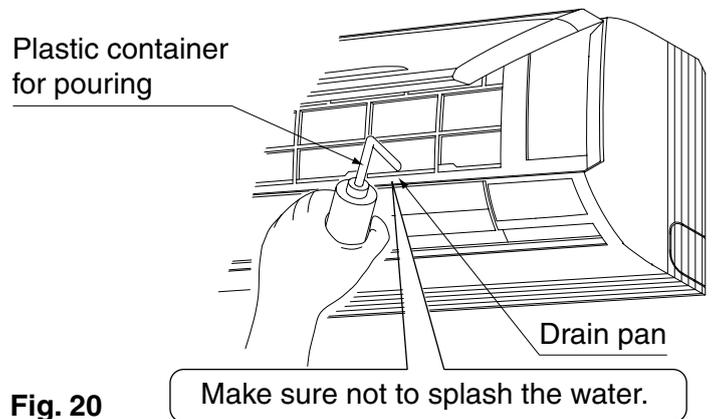


Fig. 20

CAUTION

Drain piping connections

- Do not connect the drain piping directly to sewage pipes that smell of ammonia. The ammonia in the sewage might enter the indoor unit through the drain pipes and corrode the heat exchanger.

8. ELECTRIC WIRING WORK

8-1 GENERAL INSTRUCTIONS

- Electric wiring work must be conducted by an electrician authorized by power companies (Only a licensed electrician is permitted to conduct electric work and earth connections.)
- All wiring must be performed by an authorized electrician.
- A circuit breaker capable of shutting down power supply to the entire system must be installed.
- Be sure to install an earth leakage circuit breaker in the outdoor unit.
(install the earth leakage circuit breaker to avoid electric shocks and fire.)
- The specified voltage for the wiring between the indoor and outdoor units and between the indoor units is 220-240V.
- Do not turn on the power supply (of the indoor unit) until all the installation work is completed.
- Be sure to earth the air conditioner.
- Refer to the installation manual attached to the outdoor unit for the size of power supply electric wire connected to the outdoor unit, the capacity of the circuit breaker and switch, and wiring instructions.
- Do not connect the earth wire to gas pipes, plumbing pipes, lightning rods, or telephone earth wires.
 - Gas pipes: might cause explosions or fire if gas leaks.
 - Plumbing: no earth effect if hard vinyl piping is used.
 - Telephone earth wires or lightning rods: might cause abnormally high electric potential in the earth during lightning storms.
- For electric wiring work, refer also to "WIRING DIAGRAM" attached to the inside of the front grille.
- Never connect the power supply wire to the terminal block for remote controller wire, or otherwise the entire system may be damaged.
- For remote controller wiring details, refer to the installation manual attached to the remote controller.
(A remote controller is not necessary for the slave unit in the simultaneous operation system mode.)
- Do not touch the printed circuit board assy during the wiring work. Otherwise, it may cause damage.

8-2 SPECIFICATIONS FOR FIELD WIRE

For the wiring of the outdoor unit, refer to the installation manual attached to the outdoor unit.

Remote controller and transmission wiring are field supplied. **(Refer to Table 4)**

Table 4

	Wire	Size (mm ²)	Length
Wiring between units	H05VV-U4G (NOTE 1)	2.5	—
Remote controller cord	Vinyl cord with sheath or cable (2 wire) (NOTE 2)	0.75 - 1.25	Max. 500m*

*This will be the total extended length in the system when doing group control.

Wiring specifications are shown on the condition that the wiring has a voltage drop of 2%.

NOTE

1. It shows the case when conduit pipes are used. When the conduit pipes are not used, use H07RN-F.
2. Sheathed vinyl cord or cable (insulation thickness: 1mm or more)

9. HOW TO CONNECT WIRINGS AND WIRING EXAMPLE

9-1 HOW TO CONNECT WIRINGS

Connecting methods of wiring between indoor and outdoor units, earth wiring, and remote controller wiring

- Wiring between units and earth wire

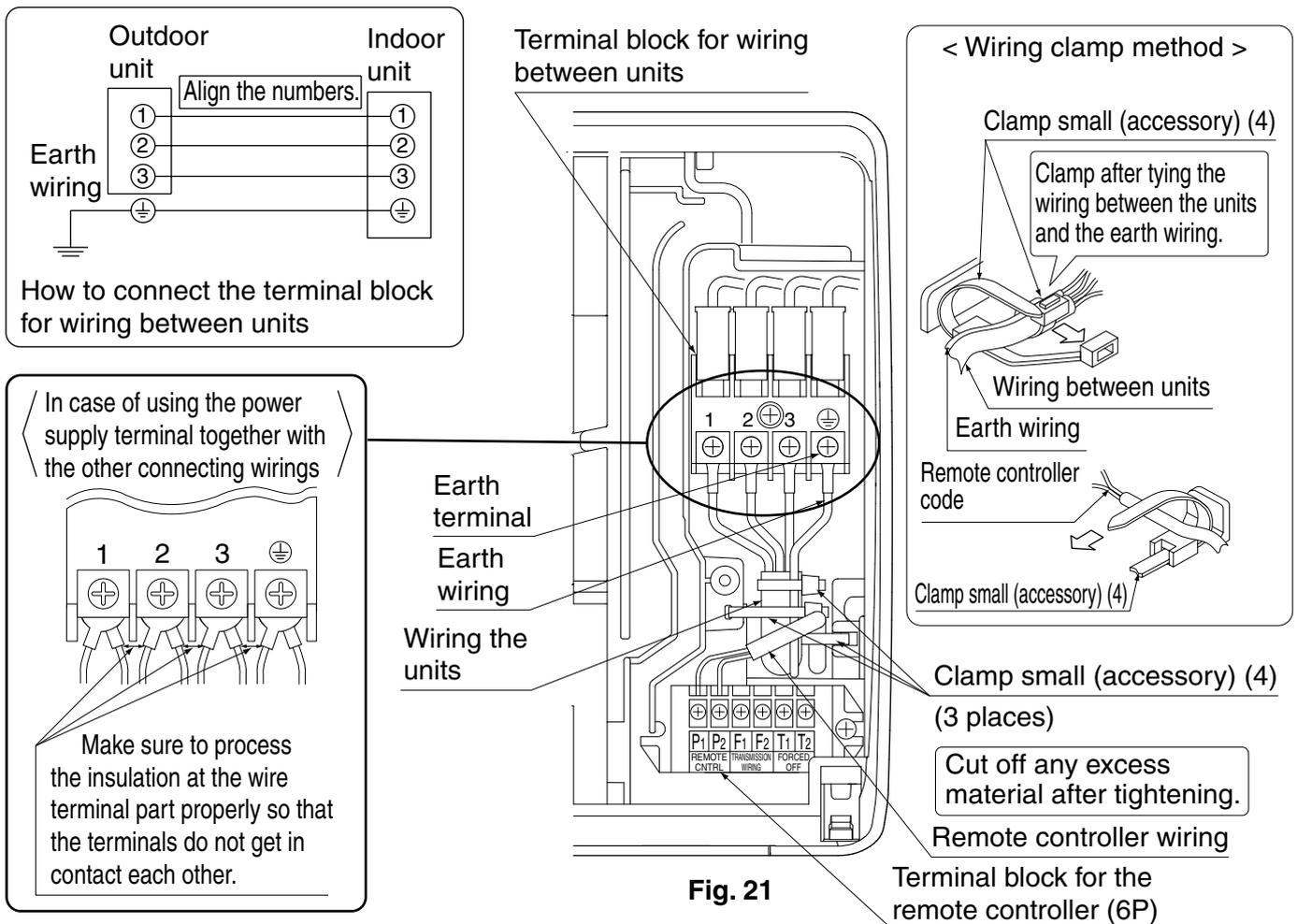
Connect the wiring between units and earth wire that are drawn into the unit in step “5. INDOOR UNIT INSTALLATION”. When doing this, tie the wiring between units and the earth wire using the included clamp (small) (4) and then firmly secure using the included clamp (small) (4). **(Refer to Fig. 21)**

- Remote controller wiring (a remote controller is not necessary for the slave unit in the simultaneous operation system mode.)

Connect the remote controller wiring to the terminal blocks (P1 and P2).

When doing this, firmly secure the remote controller wiring using the included clamp (small) (4).

(Refer to Fig. 21)



⚠ CAUTION

- Arrange the electric wiring and firmly attach the control box lid.
(Caught electric wires and detachment of the control box lid may result in electrical shock or fire.)
- After connecting the wiring, attach the putty or insulating material (field supplied) to the hole of the wiring so as not to leave any gap and prevent entry of small creatures from outside.
- Route the low voltage wires (remote controller wiring) 50mm or more away from the high voltage wires (interconnecting wires between the indoor and outdoor units) and earth wire so that they may not pass through the same place.
Otherwise electrical noise (external static) could cause mistaken operation or breakage.

Precautions to be taken for power supply wiring

Use a round crimp-style terminal for connection to the power supply terminal block. **(Refer to Fig. 22)**
 In case it cannot be used due to unavoidable reasons, be sure to observe the following instructions.

- Do not connect wires of different gauge to the same power supply terminal. (Looseness in the connection may cause overheating.) **(Refer to Fig. 23)**
- In wiring, make certain that prescribed wires are used. Also, fix the wires so that external force may not be applied to the terminals.

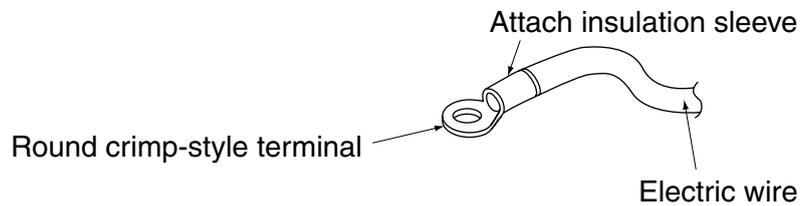


Fig. 22

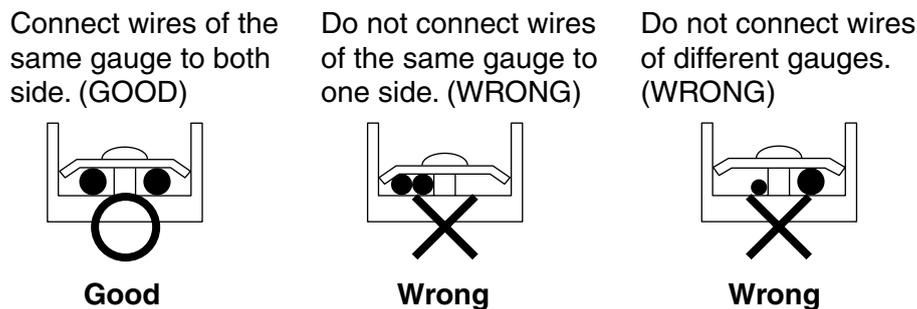


Fig. 23

Tightening torque for the terminal screws.

- Use an appropriate screwdriver to tighten the terminal screws. If the blade of screwdriver is too small, the head of the screw might be damaged, and the screw will not be properly tightened.
- If the terminal screws are tightened too hard, screws might be damaged.

Refer to the Table 5 for the tightening torque of the terminal screws.

Table 5

Tightening torque (N·m)	
Terminal block for remote controller wiring	0.79 to 0.97
Terminal block for wiring between the units	1.18 to 1.44
Earth terminal	1.18 to 1.44

- If the strand wire is used, do not solder it.

9-2 WIRING EXAMPLE

⚠ CAUTION

Be sure to install an earth leakage breaker to the outdoor unit.
This is to avoid electric shocks or fire.

For the wiring of outdoor units, refer to the installation manual attached to the outdoor units.

Confirm the system type.

- **Pair type:** 1 remote controller controls 1 indoor unit (standard system). (Refer to Fig. 24)
- **Simultaneous operation system:** 1 remote controller controls 2 indoor units
(2 indoor units operates equally.) (Refer to Fig. 25)
- **Group control:** 1 remote controller controls up to 16 indoor units
(All indoor units operate according to the remote controller). (Refer to Fig. 26)
- **2 remote controllers control:** 2 remote controllers control 1 indoor unit. (Refer to Fig. 28)

Pair type

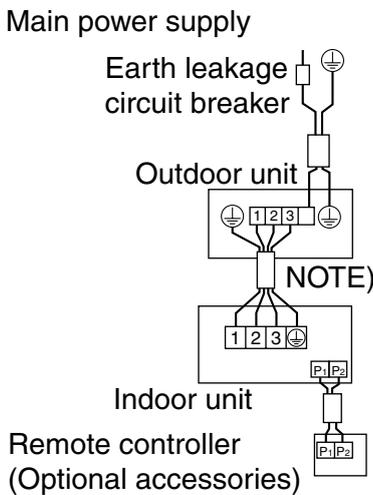


Fig. 24

Simultaneous operation system

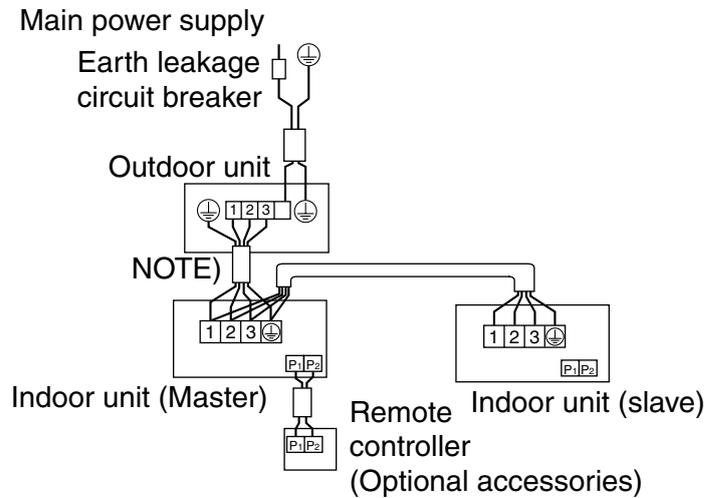


Fig. 25

Group control

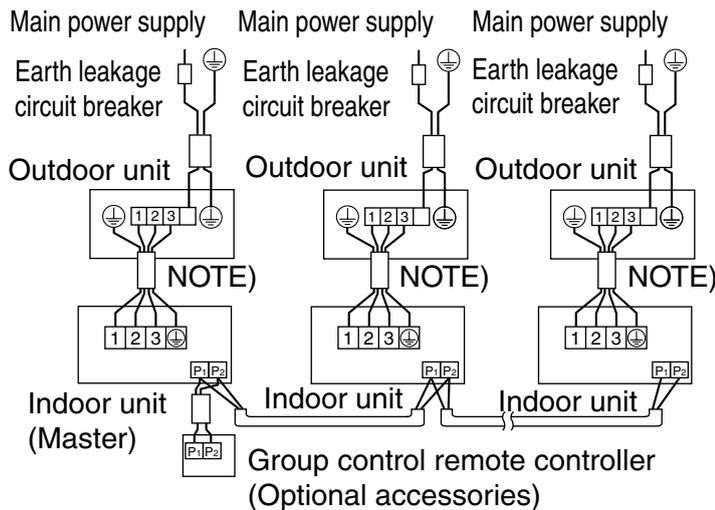


Fig. 26

NOTE

- Terminal numbers of outdoor and indoor units must agree.

When implementing group control

- When using as a pair unit or as a master unit for simultaneous multiple unit operation, you may carry out simultaneous start/stop (group) control up to 16 units with the remote controller. **(Refer to Fig. 27)**
- In this case, all the indoor units in the group will operate in accordance with the group control remote controller.
- The body thermo is effective only for the indoor unit to which the remote controller is connected.

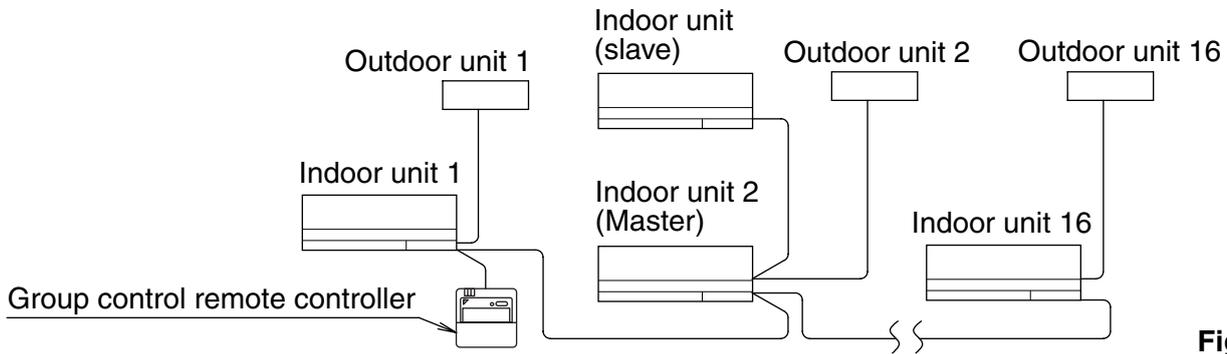


Fig. 27

Wiring Method

- (1) Remove the control box lid. (Refer to “5. INDOOR UNIT INSTALLATION”.)
- (2) Lay crossover between the terminals (P1, P2) inside the control box for the remote controller. (There is no polarity.) **(Refer to Fig. 26 and Table 4)**

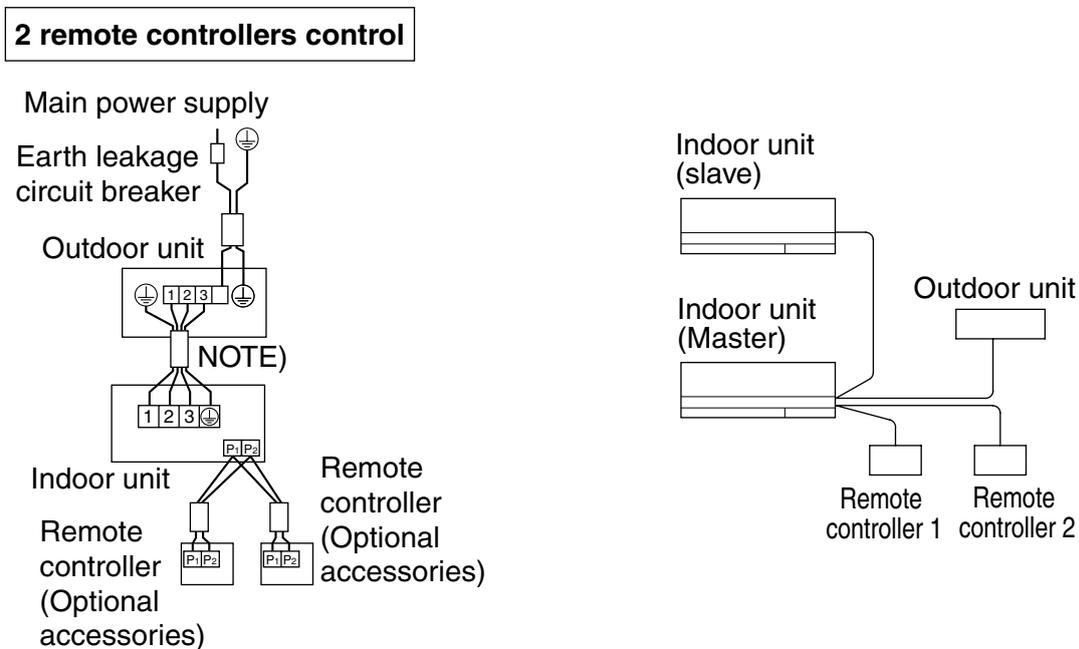


Fig. 28

NOTE

- Terminal numbers of outdoor and indoor units must agree.

Two remote controllers control (Controlling 1 indoor unit by 2 remote controllers)

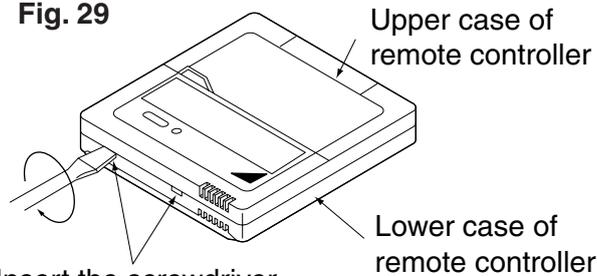
- When using 2 remote controllers, one must be set to “MAIN” and the other to “SUB”.

MAIN/SUB CHANGEOVER

- If BRC1E model remote controller is used, see the manual attached to the remote controller.

If the remote controller is a wired one, change the switch setting as follows:

- (1) Insert a flat screwdriver into the clearance between the upper case and the concave of the lower case and, remove the upper case. (2 places) (Printed circuit board is attached to the upper part of the remote controller.) **(Refer to Fig. 29)**
- (2) Turn the **main/sub changeover** switch on one of the two remote controller printed circuit boards to “S”. (Leave the switch of the other remote controller set to “M”.) **(Refer to Fig. 30)**

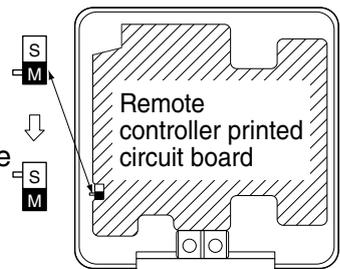
Fig. 29

Insert the screwdriver here and gently work off the upper part of remote controller.

Fig. 30

(Factory setting)

(Only one remote controller needs to be changed if factory settings have remained untouched.)



Wiring Method

(3) Remove the control box lid (Refer to “5. INDOOR UNIT INSTALLATION”).

(4) **Add wiring between the remote controller 2 (slave) and the terminal (P1, P2) of the terminal block (X1M) for the remote controller in the control box. (There is no polarity.) (Refer to Fig. 28 and Table 4)**

NOTE

1. All transmission wiring except for the remote controller wires is polarized and must match the terminal symbol.
2. In cases of group control, perform the remote controller wiring to the master unit when connecting to the simultaneous operation system. (Wiring to the slave unit is unnecessary.)
3. In case of group control and simultaneous operation system remote controller, choose the remote controller that suits the indoor unit which has the most functions (as attached swing flap).
4. For simultaneous operation system, connect the remote controller cord to the master unit.

10. FIELD SETTING

〈Complete all the “1. Items to be checked after completion of work” on page 4.〉

- Make sure that the installation and wiring work for the indoor and outdoor units is all completed.
- Make sure that the following items are all closed: the control box lid of the indoor unit and the outer board and piping cover of the outdoor unit.

<Field setting must be made from the remote controller in accordance with the installation conditions.>

- Setting can be made by changing the “Mode No.”, “FIRST CODE NO.”, and “SECOND CODE NO.”.
- For setting procedures and instructions, see the manual provided with the remote controller.

NOTE

- The “Mode No.” is normally set collectively for a group. In order to set each indoor unit individually and perform checks after the settings, specify the Mode No. in parenthesis.
- Do not perform settings that are not listed in the table.

10-1 AIRFLOW SETTINGS WHEN THERMOSTAT IS OFF

- Set the flow rate according to the requirement of the environment after consultation with the customer. (As the factory setting, airflow for when cooler thermostat is off is set to SECOND CODE NO. "02", while other settings are set to "01".) **(Refer to Table 6)**

Table 6

Setting		Mode No.	FIRST CODE NO.	SECOND CODE NO.
Fan operation when thermostat is OFF (Cooling/Heating)	Normal	11 (21)	2	01
	Stop			02
Airflow rate when cooler thermostat is OFF	LL airflow rate	12 (22)	6	01
	Setting airflow rate			02
Airflow rate when heater thermostat is OFF	LL airflow rate	12 (22)	3	01
	Setting airflow rate			02

02 are the settings when shipped from the factory.

10-2 SETTING AIR FILTER SIGN

- Remote controllers are equipped with liquid crystal display air filter signs to display the time to clean air filters.
- Change the SECOND CODE NO. according to Table 7 depending on the amount of dirt or dust in the room. (SECOND CODE NO. is factory set to "01" for air filter contamination-light.) Explain to the customer that filters need to be cleaned periodically to prevent clogging, and the time that is set.
- The periodical cleaning time for the filter can be shortened depending on the usage environment.

Table 7

Setting	Spacing time of display air filter sign	Mode No.	FIRST CODE NO.	SECOND CODE NO.
Air filter contamination-light	Approx. 200 hrs.	10 (20)	0	01
Air filter contamination-heavy	Approx. 100 hrs.			02

10-3 SETTING AIR FLOW RATE INCREASE MODE

- The set airflow rate (HH, H, and L) can be increased depending on the installation condition or customer's request. In such a case, switch the SECOND CODE NO. as shown in Table 8. (SECOND CODE NO. is factory set to "01" for standard.)

Table 8

Setting	Mode No.	FIRST CODE NO.	SECOND CODE NO.
Standard	13(23)	0	01
Slightly increase			02
Increase			03

10-4 SETTING INDOOR UNIT NUMBER OF SIMULTANEOUS OPERATION SYSTEM

- When using in simultaneous operation system mode, change the SECOND CODE NO. as shown in Table 9.
(SECOND CODE NO. is factory set to “01” for pair system.)

Table 9

Setting	Mode No.	FIRST CODE NO.	SECOND CODE NO.
Pair system (1 unit)	11 (21)	0	01
Simultaneous operation system (2-unit)			02
Simultaneous operation system (3-unit)			03

- When using in simultaneous operation system mode, refer to “**Simultaneous Operation System Individual Setting**” section to set master and slave units separately.

〈When using wireless remote controllers〉

- When using wireless remote controllers, wireless remote controller address setting is necessary. Refer to the installation manual attached to the wireless remote controller for setting instructions.

10-5 SIMULTANEOUS OPERATION SYSTEM INDIVIDUAL SETTING

It is easier if the optional remote controller is used when setting the slave unit.

Procedure

- Perform the following procedure when setting the master and slave unit separately. (Refer to Fig. 31)
- (1) Change the SECOND CODE NO. to “02”, individual setting, so that the slave unit can be individually set. (Refer to Table 10)
(SECOND CODE NO. is factory set to “01”, for unified setting.)

Table 10

Setting	Mode No.	FIRST CODE NO.	SECOND CODE NO.
Unified setting	11 (21)	1	01
Individual setting			02

NOTE

- The “Mode No.” is normally set collectively for a group. In order to set each indoor unit individually and perform checks after the settings, specify the Mode No. in parenthesis.
- (2) Perform field setting (Refer to 10-1 to 10-4) for the master unit.
 - (3) Turn off the main power supply switch after (2) is finished.
 - (4) Detach remote controller from the master unit and connect it to the slave unit.
 - (5) Turn on the main power supply switch again, and as in (1), change the SECOND CODE NO. to “02”, individual setting.
 - (6) Perform field setting (Refer to 10-1 to 10-3) for the slave unit.
 - (7) Turn off the main power supply switch after (6) is finished.
 - (8) If there is more than one slave unit, repeat steps (4) to (7).
 - (9) Detach the remote controller from the slave unit after the setting, and reattach to the master unit. This is the end of the setting procedure.
* You do not need to rewire the remote controller from the master unit if the optional remote controller for slave unit is used.
(However, remove the wires attached to the remote controller terminal board of the master unit.)
After the slave unit setting, remove the remote controller wiring, and rewire the remote controller from the master unit.
(The unit does not operate properly when two or more remote controllers are attached to the unit in the simultaneous operation system mode.)

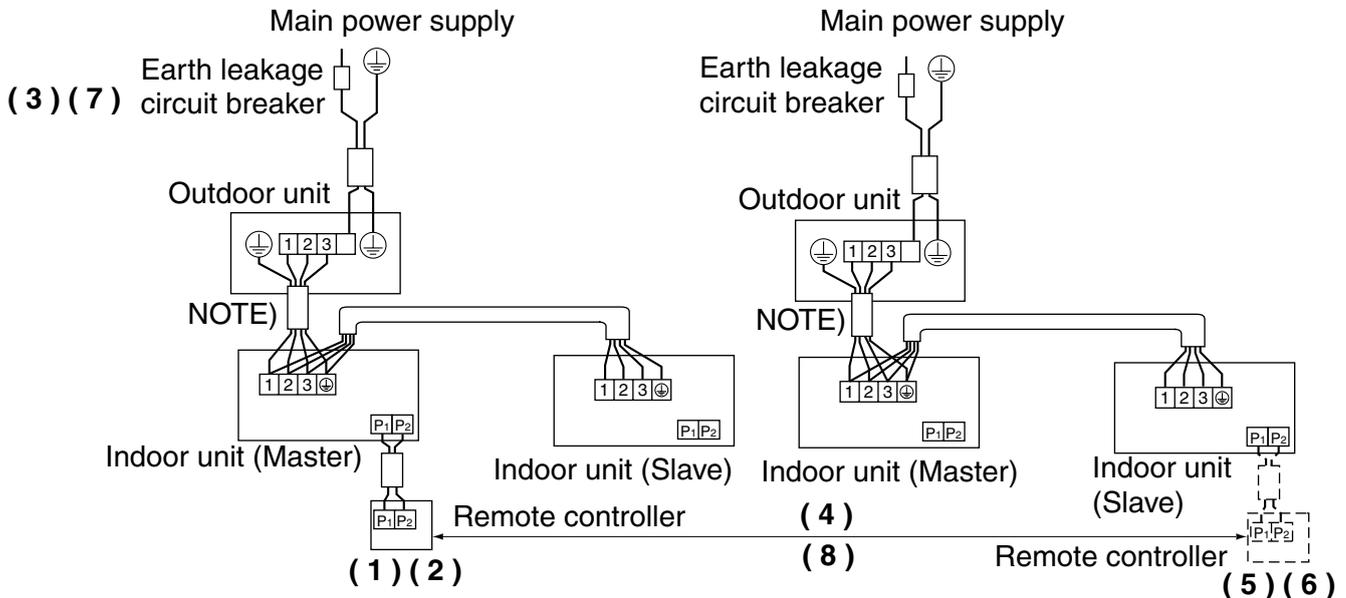


Fig. 31

NOTE

- Terminal numbers of outdoor and indoor units must agree.

10-6 COMPUTERISED CONTROL (FORCED OFF AND ON/OFF OPERATION)

(1) Wire specifications and how to perform wiring (Refer to Fig. 32)

- Connect input from outside to terminals T1 and T2 of the terminal block for remote controller. (There is no polarity.)

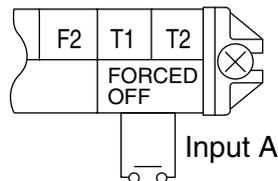


Fig. 32

Table 11

Wire specification	Sheathed vinyl cord or cable (2 wire)
Gauge	0.75 - 1.25 mm ²
Length	Max. 100 m
External terminal	Contact that can ensure the minimum applicable load of 15 V DC, 10 mA.

(2) Actuation

- The following Table 12 explains FORCED OFF and ON/OFF OPERATIONS in response to Input A.

Table 12

FORCED OFF	ON/OFF OPERATION
Input "ON" stops operation (impossible by remote controllers.)	Input OFF → ON turns ON unit.
Input OFF enables control by remote controller.	Input ON → OFF turns OFF unit.

(3) How to select FORCED OFF and ON/OFF OPERATION

- Turn on the power and then use the remote controller to select operation.
- Change the SECOND CODE NO. (Refer to Table 13)
(SECOND CODE NO. is factory set to "01" for FORCED OFF.)

Table 13

Setting	Mode No.	FIRST CODE NO.	SECOND CODE NO.
FORCED OFF	12(22)	1	01
ON/OFF OPERATION			02

11. TEST OPERATION

⟨Complete all the “1. Items to be checked after completion of work” on page 4. Please also refer to the installation manual provided with the indoor unit.⟩

The settings of the BRC1E model remote controller should be switched while referring to the manual supplied with the remote controller.

The settings of the other remote controller should be switched in accordance with the following procedure.

- Make sure that the installation work for the indoor and outdoor units is all completed.
- Make sure that the following items are all closed: the control box lid of the indoor unit and the outer board and piping cover of the outdoor unit.
- After completing the refrigerant piping, drain piping, and electrical wiring, clean the interior of the indoor unit and front panel. Next, perform test operation in accordance with the installation manual supplied with the outdoor unit in order to protect the unit.
(It is recommended that the test operation is performed in the presence of qualified electrical technician or engineer.)
- If interior work is still unfinished when test operation finishes, explain to the customer that the air conditioner must not be operated until interior work is completed in order to protect the indoor units.
(If the unit is operated under this condition, paint, glue, and other materials used during the interior finishing work will contaminate the indoor unit. This may cause water splashes or leakage.)
- If a malfunction occurs and the unit cannot operate, refer to “11-1 HOW TO DIAGNOSE FOR PROBLEMS”.
- After completing the test run, press the INSPECTION/TEST OPERATION button once to put the unit in inspection mode, and make sure the malfunction code is “00” (= normal).
If the code reads anything other than “00”, refer to “11-1 HOW TO DIAGNOSE FOR PROBLEMS”.
- Press the INSPECTION/TEST OPERATION button four times to return to normal operation mode.

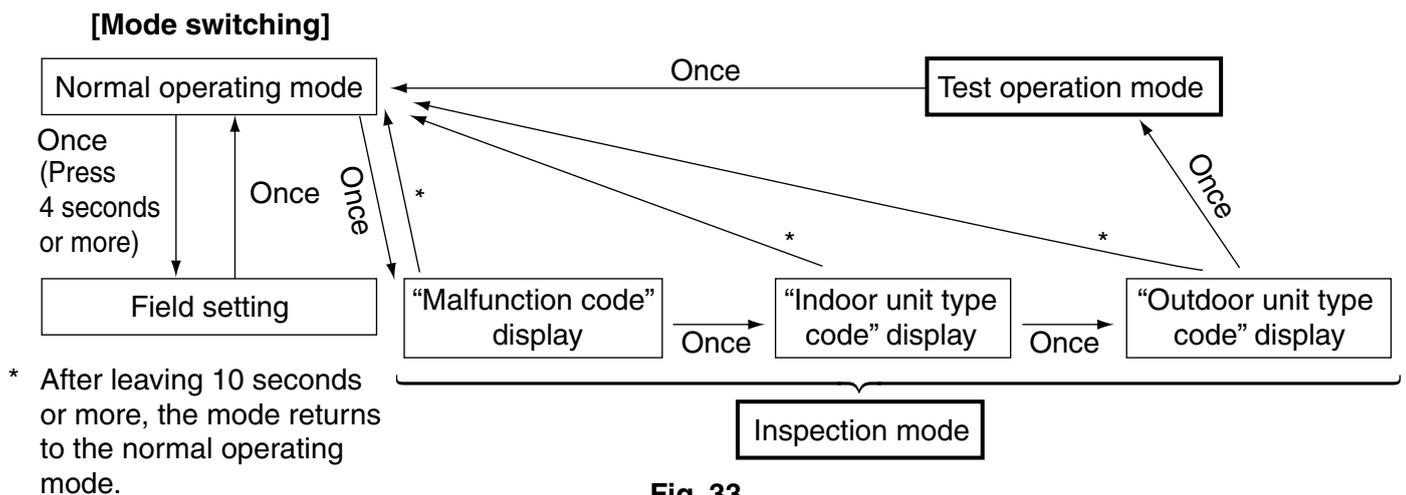


Fig. 33

11-1 HOW TO DIAGNOSE FOR PROBLEMS

With the power on. Troubles can be monitored on the remote controller.

The fault diagnosis for the BRC1E model remote controller should be performed while referring to the installation manual supplied with the remote controller. For the other remote controllers, perform the fault diagnosis using the following procedure.

■ Trouble shooting with the remote controller liquid crystal display.

1 With the wired remote controller. (NOTE 1)

When the operation stops due to trouble, the operation lamp flashes, and the liquid crystal display indicates “” and the malfunction code. Diagnosis can be carried out using the malfunction code list according to the indicated malfunction code.

In addition, when in group control it indicates the unit No., so the malfunction detected unit No. will be clarified. For resetting the malfunction, see (NOTE 2).

2 With the wireless remote controller.

(Also refer to the operation manual attached to the wireless remote controller)

When the operation stops due to trouble, the display on the indoor unit flashes. In such a case, diagnose the fault contents with the table on the Error code list looking for the error code which can be found by following procedures. (NOTE 2)

- (1) Press the INSPECTION /TEST OPERATION button, “” is displayed and “0” flashes.
- (2) Press the PROGRAMMING TIME button and find the unit No. which stopped due to trouble.
 Number of beeps 3 short beeps.....Perform all the following operations
 1 short beep.....Perform (3) and (6)
 1 long beep.....No trouble
- (3) Press the OPERATION MODE SELECTOR button and upper figure of the malfunction code flashes.
- (4) Continue pressing the PROGRAMMING TIME button unit it makes 2 short beeps and find the upper code.
- (5) Press the OPERATION MODE SELECTOR button and lower figure of the malfunction code flashes.
- (6) Continue pressing the PROGRAMMING TIME button unit it makes a long beep and find the lower code.
 - A long beep indicate the malfunction code.

NOTE 

1. When the INSPECTION/OPERATION button on the remote controller is pressed, the “” indication starts flashing.
2. When the ON/OFF button is kept pressed for 5 seconds or longer during the inspection mode, the above trouble history indication disappears. In this case, after the malfunction code indication flashes twice, the indication of code becomes “00” (normal) and unit NO. becomes “0”. Then, the display automatically changes from the inspection mode to the normal mode.

11-2 MALFUNCTION CODE

- For places where the malfunction code is left blank, the “” indication is not displayed. Though the system continues operating, be sure to inspect the system and make repairs as necessary.
- Depending on the type of indoor or outdoor unit, the malfunction code may or may not be displayed.

Malfunction code	Descriptions and measures	Remarks
A1	Indoor printed circuit board failure	
A3	Drain level abnormal	
A6	Indoor fan motor overload, over current, lock	
	Indoor printed circuit board connection failure	
AF	Humidifier system malfunction	
AH	Air purifier (dust collection, deodorization) unit malfunction	Only the air purifier (dust collection, deodorisation) unit does not function. Abnormal stop is applied depending on the model or condition.
AJ	Capacity setting failure	Capacity setting adapter or capacity data error, or disconnection of the capacity setting adapter, failure to connect the adapter, or the capacity is not set to the data-retention IC.
C1	Transmission error between indoor printed circuit board (main) and indoor printed circuit board (sub)	
C4	Indoor heat exchanger liquid pipe temperature sensor malfunction	Abnormal stop is applied depending on the model or condition.
C5	Indoor heat exchanger condenser / evaporator temperature sensor malfunction	Abnormal stop is applied depending on the model or condition.

C9	Suction air thermistor malfunction	Abnormal stop is applied depending on the model or condition.
CC	Humidity sensor abnormal	
CE	Intelligent eye / floor temperature sensor malfunction	
CJ	Remote controller air thermistor malfunction	Remote controller thermo does not function, but body thermo operation is enabled.
E0	Action of safety device (Outdoor unit)	
E1	Outdoor printed circuit board failure (Outdoor unit)	
E3	High pressure malfunction (Outdoor unit)	
E4	Low pressure malfunction (Outdoor unit)	
E5	Compressor motor lock malfunction (Outdoor unit)	
E6	Compressor motor lock by over current (Outdoor unit)	
E7	Outdoor fan motor lock malfunction (Outdoor unit)	
	Outdoor fan instant overcurrent malfunction (Outdoor unit)	
E9	Electric expansion valve malfunction (Outdoor unit)	
EA	Cooling/heating switch malfunction (Outdoor unit)	
F3	Discharge piping temperature malfunction (Outdoor unit)	
H3	High pressure switch failure (Outdoor unit)	
H4	Low pressure switch failure (Outdoor unit)	
H7	Outdoor fan motor position signal malfunction (Outdoor unit)	
H9	Outdoor air thermistor system malfunction (Outdoor unit)	Abnormal stop is applied depending on the model or condition.
J1	Pressure sensor system malfunction (batch) (Outdoor unit)	
J2	Current sensor system malfunction (Outdoor unit)	Abnormal stop is applied depending on the model or condition.
J3	Discharge pipe thermistor system malfunction (Outdoor unit)	Abnormal stop is applied depending on the model or condition.
J5	Suction pipe thermistor system malfunction (Outdoor unit)	
J6	Outdoor heat exchanger distributor liquid pipe thermistor malfunction (Outdoor unit)	Abnormal stop is applied depending on the model or condition.
J7	Outdoor heat exchanger condenser / evaporator thermistor malfunction (Outdoor unit)	Abnormal stop is applied depending on the model or condition.
J8	Liquid pipe thermistor system malfunction (Outdoor unit)	Abnormal stop is applied depending on the model or condition.
J9	Gas piping thermistor malfunction (cooling) (Outdoor unit)	

JA	Discharge pipe pressure sensor system malfunction (Outdoor unit)	
JC	Suction pipe pressure sensor system malfunction (Outdoor unit)	
L1	Inverter system malfunction (Outdoor unit)	
L3	Reactor thermistor malfunction (Outdoor unit)	
L4	Overheated heat-radiating fin (Outdoor unit)	Inverter cooling failure.
L5	Instantaneous overcurrent (Outdoor unit)	The compressor engines and turbines may be experiencing a ground fault or short circuit.
L8	Electric thermal (Outdoor unit)	The compressor engines and turbines may be overloaded and disconnected.
L9	Stall prevention (Outdoor unit)	The compressor may be locked.
LC	Transmission malfunction between inverter and outdoor control unit (Outdoor unit)	
P1	Open-phase (Outdoor unit)	
P3	DCL sensor system malfunction (Outdoor unit)	
P4	Heat-radiating fin thermistor malfunction (Outdoor unit)	Abnormal stop is applied depending on the model or condition.
P6	DC output current sensor system malfunction (Outdoor unit)	
PJ	Capacity setting failure (Outdoor unit)	Capacity setting adapter or capacity data error, or disconnection of the capacity setting adapter, failure to connect the adapter, or the capacity is not set to the data-retention IC.
U0	Suction pipe temperature abnormal (Outdoor unit)	The refrigerant may be insufficient. Abnormal stop is applied depending on the model or condition.
U1	Reverse phase (Outdoor unit)	Reverse two phase of L1, L2 and L3 leads.
U2	Power voltage malfunction (Outdoor unit)	The inverter open-phase or main circuit condenser may be malfunctioning. Abnormal stop is applied depending on the model or condition.
U4 UF	Transmission error (between indoor and outdoor units)	Wiring error between indoor and outdoor unit. Or Indoor and outdoor printed circuit board failure.
U5	Transmission error (between indoor and remote controller units)	Transmission between indoor unit and remote controller is not performed properly.
U8	Transmission error between main and sub remote controllers (sub remote controller malfunction)	
UA	Field setting error	System setting error of the simultaneous on/off multi-split type.
UE	Transmission error (between indoor unit and centralized remote controller)	
UC	Remote controller address setting error	
UJ	Accessory equipment transmission error	Abnormal stop is applied depending on the model or condition.

⚠ CAUTION

- Refer to “2. Items to be checked at time of delivery to customer” on page 4 upon completion of the test operation and make sure that all the items are checked.
 - If the customer’s interior work is not finished on completion of the test operation, tell the customer not to operate the air conditioner.
Substances generated from paints and adhesives used for the interior work may contaminate the product if the unit is operated.
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⚠ To test operation Contractors

When delivering the product to the customer after the test operation is completed, check that the control box lid, the air filter and the suction grille are mounted. In addition, explain to the customer regarding the state (ON/OFF) of the power supply breaker.

12. WIRING DIAGRAM

(Refer to Fig. 34)

1	TO OUTDOOR UNIT	2	(NOTE 10)
3	(NOTE 4)	4	IN CASE OF SIMULTANEOUS OPERATION SYSTEM
5	(NOTE 6)	6	INDOOR UNIT (MASTER)
7	INDOOR UNIT (SLAVE)	8	REMOTE CONTROLLER
9	(NOTE 8)	10	WIRELESS REMOTE CONTROLLER (RECEIVER/ DISPLAY UNIT) (OPTIONAL ACCESSORY)
11	INPUT FROM OUTSIDE	12	TRANSMISSION WIRING CENTRAL REMOTE CONTROLLER
13	(NOTE 5)	14	WIRED REMOTE CONTROLLER (OPTIONAL ACCESSORY)
15	(NOTE 7)	16	FRONT
17	SIDE	18	CONTROL BOX

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