
SPLIT SYSTEM**Air Conditioners**

MODELS

(Ceiling suspension type)

FHQQ71CVEB

FHQQ100CVEB

FHQQ125CVEB

FHQQ140CVEB

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



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1. SAFETY PRECAUTIONS

Please read these “SAFETY PRECAUTIONS” carefully before installing air conditioning equipment and be sure to install it correctly.

After completing installation, conduct a trial operation to check for faults and explain to the customer how to operate the air conditioner and take care of it with the aid of the operation manual. Ask the customer to store the installation manual along with the operation manual for future reference.

This air conditioner comes under the term “appliances not accesible to the general public”.

Meaning of WARNING and CAUTION notices.

 **WARNING** Failure to follow these instructions properly may result in personal injury or loss of life.

 **CAUTION** Failure to observe these instructions properly may result in property damage or personal injury, which may be serious depending on the circumstances.

WARNING

- Ask your dealer or qualified personnel to carry out installation work.
Do not attempt to install the air conditioner yourself. Improper installation may result in water leakage, electric shocks or fire.
- Install the air conditioner in accordance with the instructions in this installation manual.
Improper installation may result in water leakage, electric shocks or fire.
- Be sure to use only the specified accessories and parts for installation work.
Failure to use the specified parts may result in the unit falling, water leakage, electric shocks or fire.

- When installing the unit in a small room, take measures against to keep refrigerant concentration from exceeding allowable safety limits in the event of refrigerant leakage.
Contact the place of purchase for more information. Excessive refrigerant in a closed ambient can lead to oxygen deficiency.
- Install the air conditioner on a foundation strong enough to withstand the weight of the unit.
A foundation of insufficient strength may result in the equipment falling and causing injury.
- Carry out the specified installation work after taking into account strong winds, typhoons or earthquakes.
Failure to do so during installation work may result in the unit falling and causing accidents.
- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local laws and regulations and this installation manual.
An insufficient power supply capacity or improper electrical construction may lead to electric shocks or fire.
- Make sure that all wiring is secured, the specified wires are used, and that there is no strain on the terminal connections or wires.
Improper connections or securing of wires may result in abnormal heat build-up or fire.
- When wiring the power supply and connecting the wiring between the indoor and outdoor units, position the wires so that the control box lid can be securely fastened.
Improper positioning of the control box lid may result in electric shocks, fire or overheating terminals.
- If refrigerant gas leaks during installation, ventilate the area immediately.
Toxic gas may be produced if the refrigerant comes into contact with fire.
- After completing installation, check for refrigerant gas leakage.
Toxic gas may be produced if the refrigerant gas leaks into the room and comes into contact with a source of fire, such as a fan heater, stove or cooker.
- Be sure to switch off the unit before touching any electrical parts.
- Be sure to earth the air conditioner.
Do not earth the unit to a utility pipe, lightning conductor or telephone earth lead.
Imperfect earthing may result in electric shocks or fire.
A high surge current from lightning or other sources may cause damage to the air conditioner.
- Be sure to install an earth leakage breaker.
Failure to install an earth leakage breaker may result in electric shocks or fire.
- Do not directly touch refrigerant that has leaked from refrigerant pipes or other areas, as there is a danger of frostbite.

CAUTION

- While following the instructions in this installation manual, install drain piping to ensure proper drainage and insulate piping to prevent condensation.
Improper drain piping may result in indoor water leakage and property damage.
- 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.)
- Remote controller (wireless kit) transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types).
Install the indoor unit as far away from fluorescent lamps as possible.
- Do not install the air conditioner in the following locations:
 1. Where there is a high concentration of mineral oil spray or vapour (e.g. a kitchen).
Plastic parts will deteriorate, parts may fall off and water leakage could result.
 2. Where corrosive gas, such as sulphurous acid gas, is produced.
Corroding of copper pipes or soldered parts may result in refrigerant leakage.
 3. Near machinery emitting electromagnetic radiation.
Electromagnetic radiation may disturb the operation of the control system and result in a malfunction of the unit.
 4. Where flammable gas may leak, where there is carbon fibre or ignitable dust suspensions in the air, or where volatile flammables such as paint thinner or gasoline are handled.
Operating the unit in such conditions may result in fire.
- The air conditioner is not intended for use in a potentially explosive atmosphere.

2. BEFORE INSTALLATION

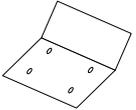
Do not exert pressure on the resin parts when opening the unit or when moving it after opening. Be sure to check the type of R410A refrigerant to be used before doing any work. (Using an incorrect refrigerant will prevent normal operation of the unit.)

- When moving the unit while removing it from the carton box, be sure to lift it by holding on to the four lifting lugs without exerting any pressure on other parts, especially swing flap, the refrigerant piping, drain piping, and other resin parts.
- The accessories needed for installation must be retained in your custody until the installation work is completed. Do not discard them! After the indoor unit is delivered, protect the unit using packaging material until the installation so that it is not scratched.
- Decide upon a line of transport.
- Leave the unit inside its packaging while moving, until reaching the installation site. Where unpacking is unavoidable, use a sling of soft material or protective plates together with a rope when lifting, to avoid damage or scratches to the unit.
- When selecting installation site, refer to the paper pattern.
- For the installation of an outdoor unit, refer to the installation manual attached to the outdoor unit.
- Do not use the unit in locations with high salt content in the air such as beachfront property, locations where the voltage fluctuates such as factories, or in automobiles or marine vessels.

2-1 ACCESSORIES

Check the following accessories are included with your unit.

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

Name	1) Drain hose	2) Metal clamp	3) Washer for hanger bracket	4) Clamp	5) Paper pattern for installation
Quantity	1 pc.	1 pc.	8 pcs.	7 pcs.	1 pc.
Shape					

Name	Insulation for fitting	Sealing pad	10) Bushing	11) Fixture	12) Screw thread (M4)	(Other)
Quantity	1 each.	1 each.	1 pc.	2 pcs.	2 pcs.	
Shape	6) For gas pipe  7) For liquid pipe 	8) Large  9) Small 				

2-2 OPTIONAL ACCESSORIES

- The remote controller are required for this indoor unit "Table 1".
- 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.

Table 1

Wired type	BRC1E51A7, BRC1D528
Wireless type	BRC7G63

NOTE

- If you wish to use a remote controller that is not listed in "Table 1", select a suitable remote controller after consulting catalogs and technical materials.

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

a. 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 and outdoor unit fixed firmly?	The units may drop, vibrate or make noise.	
Is the installation unit and the outdoor unit completed?	The unit may malfunction or the components burn out.	
Is the gas leak test finished?	It may result in insufficient cooling.	
Is the unit fully insulated?	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 burn out.	
Are wiring and piping correct?	The unit may malfunction or the components 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 burn out.	
Is something blocking the air outlet or inlet of either the indoor or outdoor units?	It may result in insufficient cooling.	
Are refrigerant piping length and additional refrigerant charge noted down?	The refrigerant charge in the system is not clear.	

b. Items to be checked at time of delivery

* Also review the "SAFETY PRECAUTIONS"

Items to be checked	Check
Has the field setting done (as necessary)?	
Did you attach the control box lid, 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 instruction manual to your customer?	
Did you hand the instruction manual over to your customer?	

c. Points for explanation about operations

The items with  WARNING and  CAUTION marks in the instruction manual are the items pertaining to possibilities for bodily injury and material damage in addition to the general usage of the product. Accordingly, it is necessary that you make a full explanation about the described contents and also ask your customers to read the instruction manual.

2-3 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 themselves while looking at the manual.

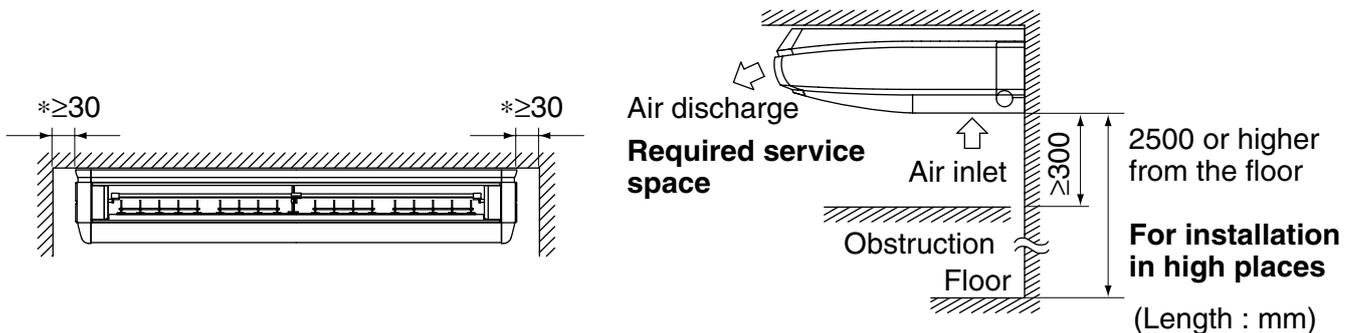
3. SELECTING INSTALLATION SITE

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

- Where optimum air distribution can be ensured.
- Where nothing blocks air passage.
- Where condensate can be properly drained.
- Where the ceiling is strong enough to bear the indoor unit weight.
(Due to the insufficient strength of the ceiling, the indoor unit may vibrate and come in contact with the ceiling, and this causes a buzzing noise.)
- Where the false ceiling is not noticeably on an incline.
- Where there is no risk of flammable gas leakage.
- Where sufficient clearance for maintenance and service can be ensured.

NOTE

- If there is space left over in the * section, opening it up 200 mm will make servicing easier.



- Where piping between indoor and outdoor units is possible within the allowable limit. (Refer to the installation manual for the outdoor unit.)

CAUTION

- Install the indoor and outdoor units, power cord and connecting wires at least 1 meter away from televisions or radios in order to prevent image interference or noise.
(Depending on the radio waves, a distance of 1 meter may not be sufficient enough to eliminate the noise.)
- When the wireless kit is installed, the remote controller transmitting distance may be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types). Install the indoor unit as far away from fluorescent lamps as possible.

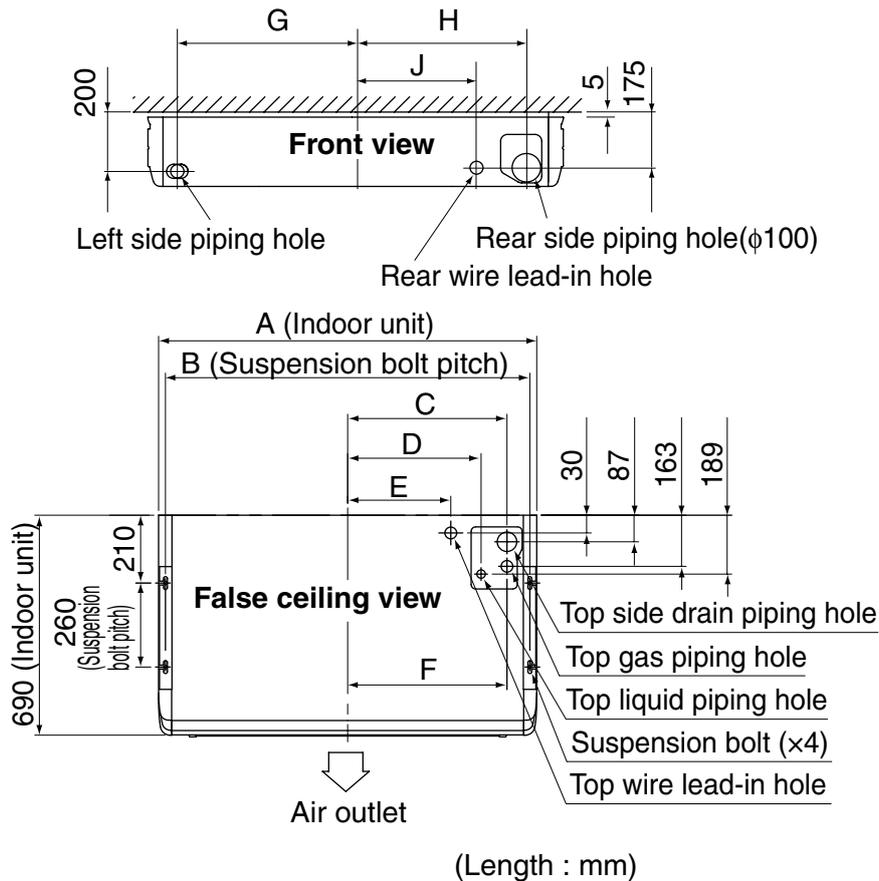
(2) Use suspension bolts for installation. Check whether the ceiling is strong enough to support the weight of the unit or not. If there is a risk, reinforce the ceiling before installing the unit.

(Installation pitch is marked on the paper pattern for installation. Refer to it to check for points requiring reinforcing.)

(3) The maximum ceiling height for installation is 3.5 m for unit type 71 and 4.3 m for unit type 100, 125 and 140.

4. PREPARATIONS BEFORE INSTALLATION

(1) Relation of holes for indoor unit, suspension bolt position, piping and wiring.



Model	A	B	C	D	E	F	G	H	J
Type 71	1270	1230	533	479	425	530	553	532	415
Type 100, 125, 140	1590	1550	693	639	585	690	713	692	575

(2) Make holes for suspension bolts, refrigerant and drain piping, and wiring.

- Refer to the paper pattern for installation.
- Select the location for each of holes and open the holes in the ceiling.

(3) Remove the parts from the indoor unit.

(3-1) Detach the suction grille.

- Slide the locking knobs (x3) on the suction grille inward (direction of arrows) and lift upwards. (Refer to Fig. 1)
- With the suction grille open, remove the suction grille forward, holding on to the rear tabs on the suction grille. (Refer to Fig. 2)

Fig. 1

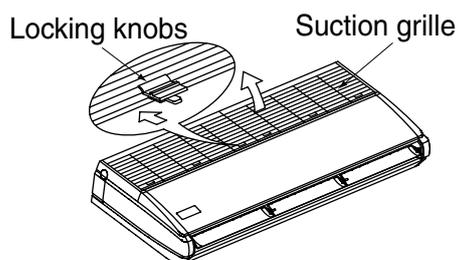
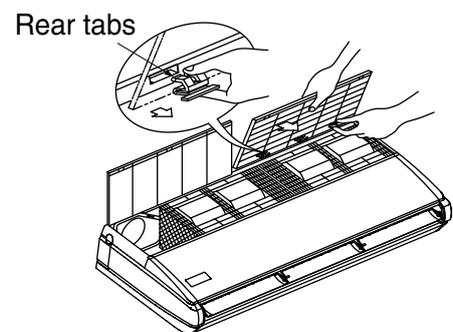


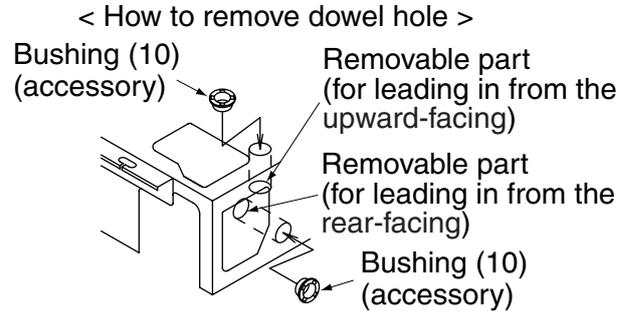
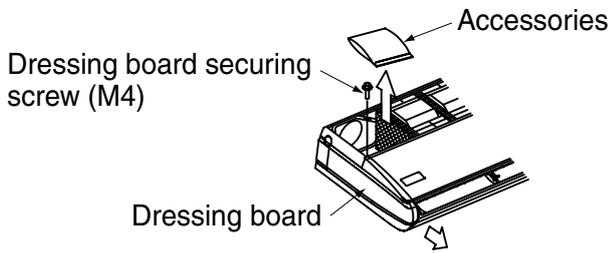
Fig. 2



(3-2) Remove the dressing boards (left and right).

- After removing the securing screws for the dressing boards (one each), pull them forward (in the direction of the arrow) and remove them. **(Refer to Fig. 3)**
- Take out the accessories.
- Make a dowel hole on the wiring lead-in side on the rear-facing or upward-facing, and then install the bushing (10) provided.

Fig. 3



(3-3) Remove the hanger brackets.

- Loosen the 2 bolts (M8) used to attach the hanger brackets which are on each side (4 places left and right) to within 10 mm. **(Refer to Fig. 4. 5)**
- After removing the securing screws (M5) for the hanger brackets which are on the rear side, pull the hanger brackets back (in the direction of the arrow), and remove them. **(Refer to Fig. 5)**

Fig. 4

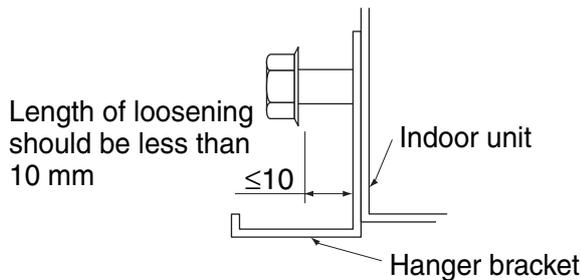
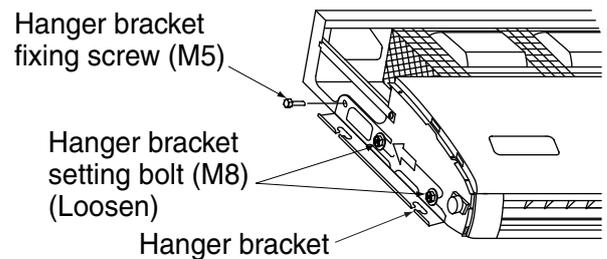


Fig. 5



CAUTION

Do not remove the tape (translucent white) attached to the outside of the indoor unit. (Penetration of water may result in electrical shock or fire.)

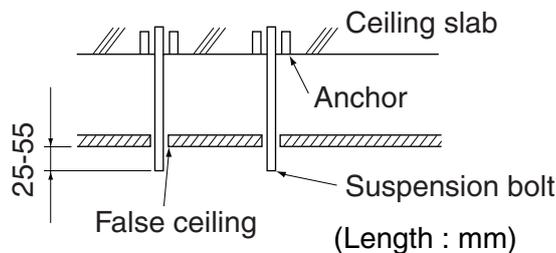
(4) Attach the suspension bolts. (Use suspension bolts which are M8-M10 in size.)

- Adjust the distance of the suspension bolts from the ceiling in advance. **(Refer to Fig. 6)**

NOTE

- Use a hole-in anchor for existing ceilings, and a sunken insert, sunken anchor or other field supplied parts for new ceilings to reinforce the ceiling to bear the weight of the unit. Adjust clearance from the ceiling before proceeding further.

Fig. 6



All the above parts are field supplied.

CAUTION

If the suspension bolts are too long, the indoor unit or optional accessories may be damaged or break down.

5. INDOOR UNIT INSTALLATION

It may be easier to attach accessory parts before installing the indoor unit. Therefore, please also read the instruction manuals which are provided with the accessory parts.

As for the parts to be used for installation work, be sure to use the provided accessories and specified parts designated by our company.

(1) Secure the hanger brackets to the suspension bolts. (Refer to Fig. 7)

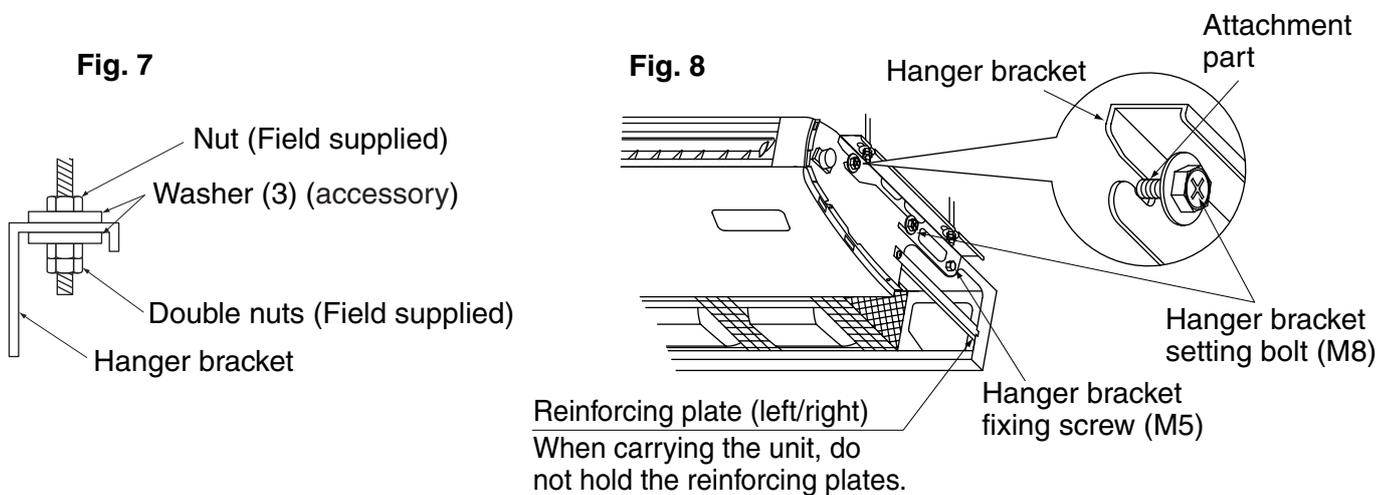
NOTE

- To ensure they are safely secured, use the included washers, and secure them with double nuts to make sure.

(2) Lift the indoor unit's main body, insert the bolts (M8) for the hanger brackets into the attachment part on the hanger brackets, while sliding the main body from the front. (Refer to Fig. 8)

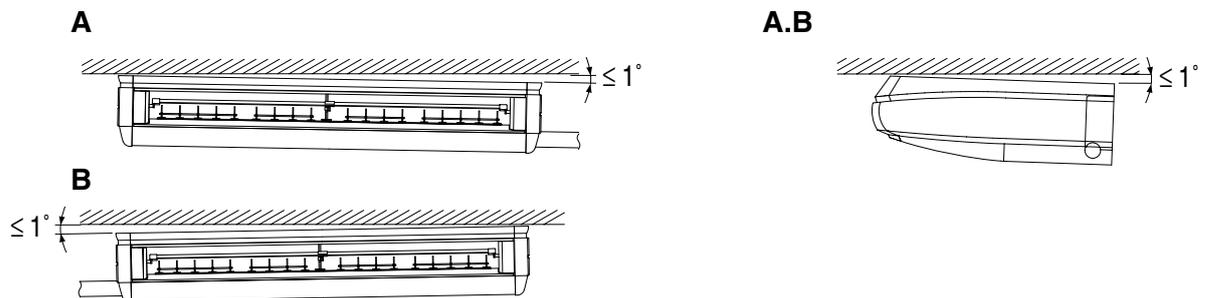
(3) Replace the screws for the hanger brackets which had been removed (M5) securely in 2 places left and right. This is necessary to prevent any forward and back slide in the main body of the indoor unit. (Refer to Fig. 8)

(4) Fasten the bolts for the hanger brackets (M8) securely in 4 places, left and right. (Refer to Fig. 8)



(5) When hanging the indoor unit main body, be sure to use a level or a plastic tube with water in it to make sure the drain piping is set either level or slightly tilted, in order to ensure proper drainage. (Refer to Fig. 9)

Fig. 9



A. When the drain piping is tilted to the right, or to the right and back.

Place it level, or tilt it slightly to the right or the back. (Within 1° .)

B. When the drain piping is tilted to the left, or to the left and back.

Place it level, or tilt it slightly to the left or the back. (Within 1° .)

CAUTION

Setting the unit at an angle opposite to the drain piping might cause a water leakage.

6. REFRIGERANT PIPING WORK

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

⟨Execute heat insulation work completely on both sides of the gas piping and the liquid piping. Otherwise, a water leakage can result sometimes.⟩

(When using a heat pump, the temperature of the gas piping can reach up to approximately 120°C, so use insulation which is sufficiently resistant.)

⟨Also, in cases where the temperature and humidity of the refrigerant piping sections might exceed 30°C or RH80 %, reinforce the refrigerant insulation. (20 mm or thicker) Condensation may form on the surface of the insulating material.⟩

⟨Before refrigerant piping work, check which type of R410A refrigerant is used. Proper operation is not possible if the types of refrigerant are not the same.⟩

⚠ CAUTION

- Use a pipe cutter and flare suitable for the type of R410A refrigerant.
- Apply ester oil or ether oil around the flare section before connecting.
- Make sure to use the flare nut provided with the main unit. Using other flare nuts may cause refrigerant leakage.
- To prevent dust, moisture or other foreign matter from infiltrating the tube, either pinch the end or cover it 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.

- Before performing refrigerant piping work, install the stay (reinforcing plate) used for packaging and transporting.
- The outdoor unit is charged with refrigerant.
- Be sure to use both a spanner and torque wrench together, as shown in the drawing, when connecting or disconnecting pipes to/from the unit. (Refer to Fig. 10)
- Refer to "Table 2" for the dimensions of flare nut spaces.
- When connecting the flare nut, coat the flare section (both inside and outside) with ester oil or ether oil, rotate three or four times first, then screw in. (Refer to Fig. 11)

Fig. 10

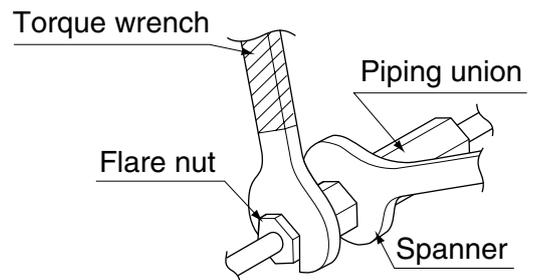
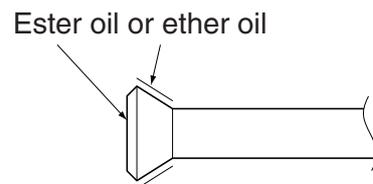


Fig. 11



⚠ CAUTION

- Overtightening may damage the flare and cause a refrigerant leakage.
- Do not let oil get on the screw holders on the dressing board. Oil can weaken the screw holders.

Table 2

Pipe size	Tightening torque	Applicable model	Flare dimensions A (mm)		Flare
			FHQG-CVEB		
φ9.5(3/8")	32.7-39.9 N • m		12.8 – 13.2		
φ15.9(5/8")	61.8-75.4 N • m		19.3 – 19.7		

⚠ CAUTION

Be careful not to damage the flare section.

- Refer to "Table 2" to determine the proper tightening torque.

— Not recommendable but in case of emergency —

You must use a torque wrench but if you are obliged to install the unit without a torque wrench, you may follow the installation method mentioned below.

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

When you keep on tightening the flare nut with a spanner, there is a point where the tightening torque suddenly increases. From that position, further tighten the flare nut the angle shown below:
Unless followed the tightening instruction (it is loose tightening), it will lead to the refrigerant leakage (slow leak) and the device malfunction (it does not sufficiently cool or heat).

Pipe size	Further tightening angle	Recommended arm length of tool
φ9.5 (3/8")	60 to 90 degrees	Approx. 200mm
φ15.9 (5/8")	30 to 60 degrees	Approx. 300mm

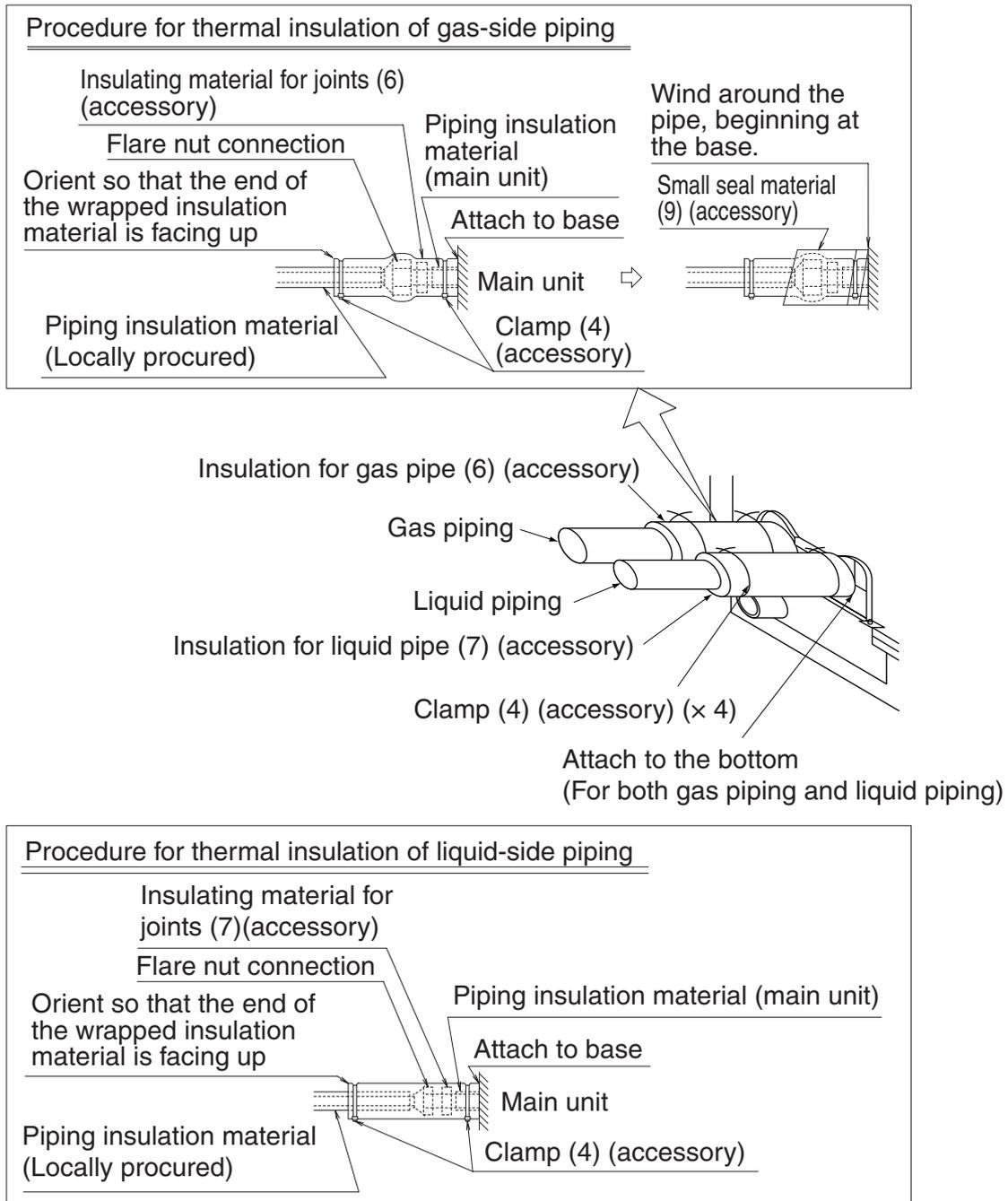
- Make absolutely sure to execute heat insulation works on the pipe-connecting section after checking gas leakage by thoroughly studying the following figure and using the attached heat insulating materials for fitting (6) and (7). (Fasten both ends with the clamps (4).) **(Refer to Fig. 12)**
- Wind the sealing pad (small) (9) around insulation for the fitting (6) only on the gas piping side. **(Refer to Fig. 12)**
- Orient the insulating material for fitting (6) and (7) while facing it upward.



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.)

Fig. 12



<Method of connecting piping>

(1) For piping facing back.

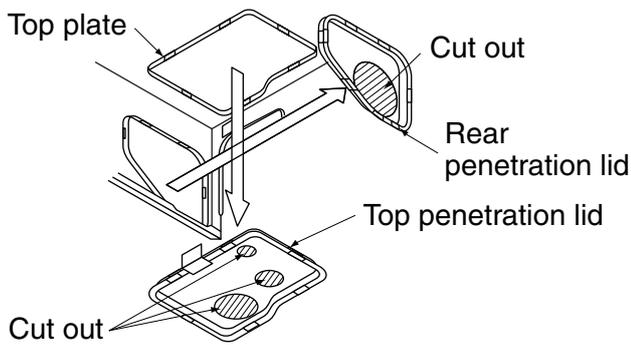
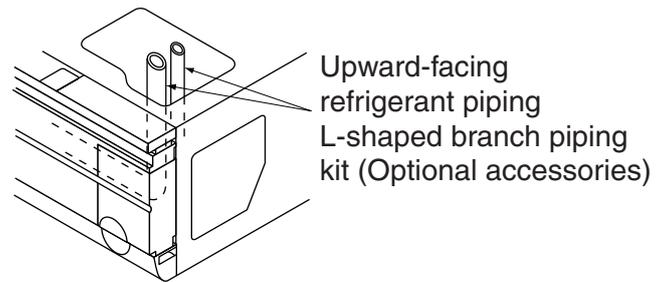
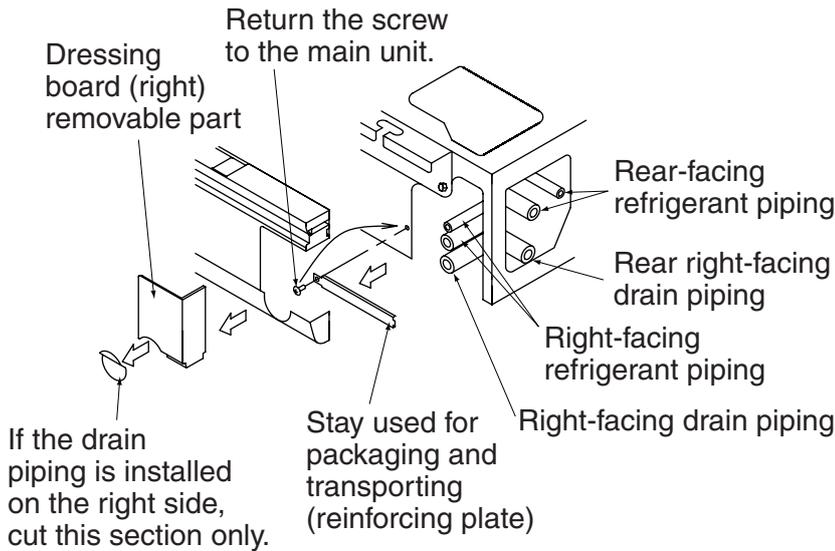
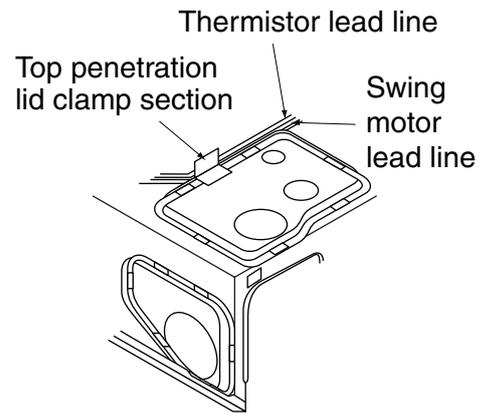
- Remove the rear penetration lid and set the piping. **(Refer to Fig. 13.15)**

(2) For piping facing up.

- When setting the piping to face up, the L-shaped branch piping kit sold separately is required.
- Removing the top penetration lid and use the L-shaped branch piping kit sold separately to set the piping. **(Refer to Fig. 13.14)**

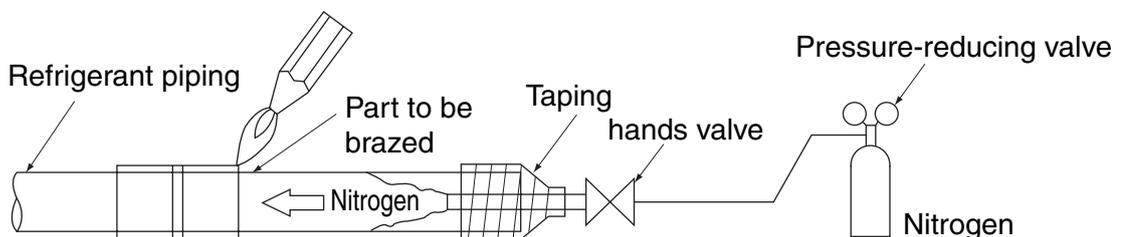
(3) For piping facing right.

- Remove the stay (reinforcing plate) used for packaging and transporting on the right side, and return the screws to the original positions in the main unit. **(Refer to Fig. 15)**
It is not necessary to install the stay (reinforcing plate) used for packaging and transporting that was removed.
- Cut out a slit hole on the dressing board (right) and set the piping. **(Refer to Fig. 15)**

Fig. 13**Fig. 14****Fig. 15****Fig. 16**

- * When piping is complete, cut the removed penetration lid into the shape of the piping using scissors and attach. As when before removing the top penetration lid, secure the lead lines for the swing motor and thermistor by passing them through the clamp section on the top penetration lid. **(Refer to Fig. 13.17)**
- * When doing this, block any gaps between the piping penetration lid and the pipes using putty to prevent dust from entering the indoor unit. However, before running the piping and wiring for the remote controller through the same hole, complete "8. ELECTRIC WIRING WORK" and then fill the gap between the penetration lid and piping.

- When brazing the refrigerant piping, only begin brazing (note 3) after carrying out nitrogen exchange (note 1) or while injecting nitrogen into the refrigerant piping (note 2). Once this is done, connect the indoor unit with the flared connection. **(Refer to Fig. 17)**

**Fig. 17****NOTE**

1. For the nitrogen exchange procedures, please refer to the Multi-split Type Series for Building Installation manual (contact your Daikin dealer).
2. Nitrogen should be set to 0.02MPa with a pressure-reducing valve if brazing while inserting nitrogen into the piping.

3. Do not use flux when brazing refrigerant piping. Therefore, use the phosphor copper brazing filler metal (BCuP-2: JIS Z 3264/B-Cu93P-710/795: ISO 3677) which does not require flux. (Flux has extremely harmful influence on refrigerant piping systems. For instance, if the chlorine based flux is used, it will cause pipe corrosion or, in particular, if the flux contains fluorine, it will damage the refrigerant oil.)
4. When the airtight test is performed for the indoor unit and inter-unit piping after indoor unit installation, be sure to refer to the installation manual for the indoor unit or technical guide for airtight pressurization and refrigerant piping installation.
5. If the refrigerant functions inefficiently due to a failure to perform air purge and additional refrigerant filling, the devices may malfunction (no cooling or heating, etc.).
Please refer to the installation manual for the indoor unit and technical guide for the refrigerant piping installation.

CAUTION

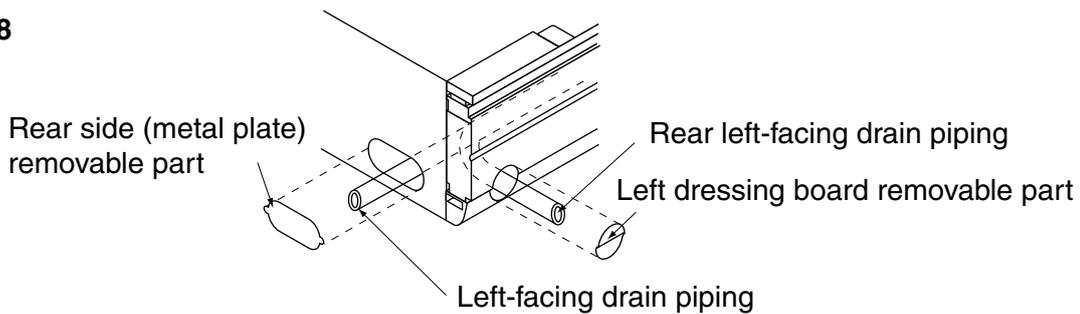
Do not use anything such as the oxidation inhibitor when brazing. (Residues may result in the clogging pipe or parts damage.)

7. DRAIN PIPING WORK

(1) Carry out the drain piping.

- **Make sure piping provides proper drainage.**
- You can select whether to bring the drain piping out from the rear right, right, rear left, or left. For rear right-facing and right-facing situations, refer to Fig. 15 for rear left-facing and left-facing situations. **(Refer to Fig. 18)**

Fig. 18

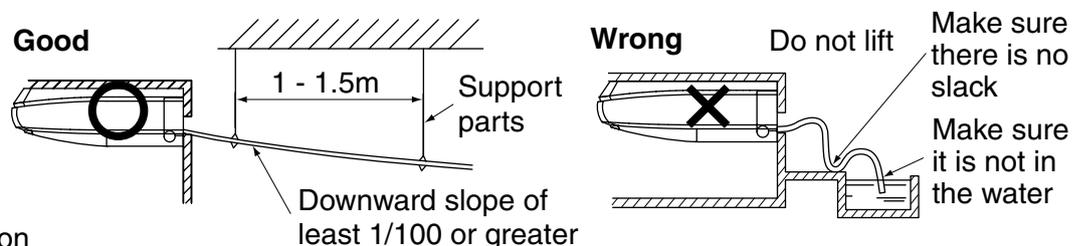


- When setting piping facing left, move the rubber stopper and insulation which are attached to the drain pipe connection hole on the left side of the indoor unit to the right-side drain pipe connection hole. When doing this, insert the rubber stopper all the way in to prevent a water leakage. After the drain hose installing, attach the protection net by reversing the steps taken to remove it. **(Refer to Fig. 19)**
- Make sure the pipe diameter is the same or bigger than the branch piping. (vinyl-chloride piping, nominal diameter 20 mm, external diameter 26 mm)
- Make sure the piping is short, has **at least a 1/100 slope**, and can prevent air pockets from forming. **(Refer to Fig. 20)**

Fig. 19



Fig. 20



CAUTION

Water accumulating in the drain piping can cause the drain to clog.

- Be sure to use the included drain hose (1) and metal clamp (2).
Also, insert the drain hose completely into the drain socket, and securely attach the clamp bracket inside on the inserted tip of the drain hose. **(Refer to Fig. 21, 22)**
(Install the metal clamp (2) as shown in the picture so that the tightening section is within about a 45 degree range.) (Do not allow the drain socket to come in contact with the drain hose. If they contact each other, maintenance operations cannot be performed for the heat exchanger, etc.)
- Bend the end of the metal clamp (2) so that the sealing pad does not bulge. **(Refer to Fig. 22)**
- When performing insulation, wind the large sealing pad (8) provided starting from the base of the metal clamp (2) and drain hose (1) in the direction of the arrow. **(Refer to Fig. 21, 22)**

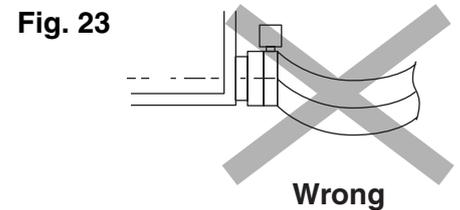
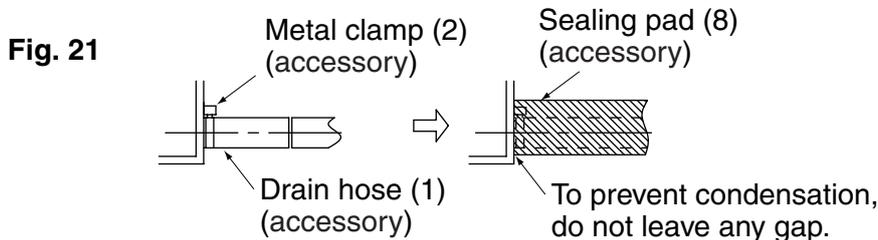
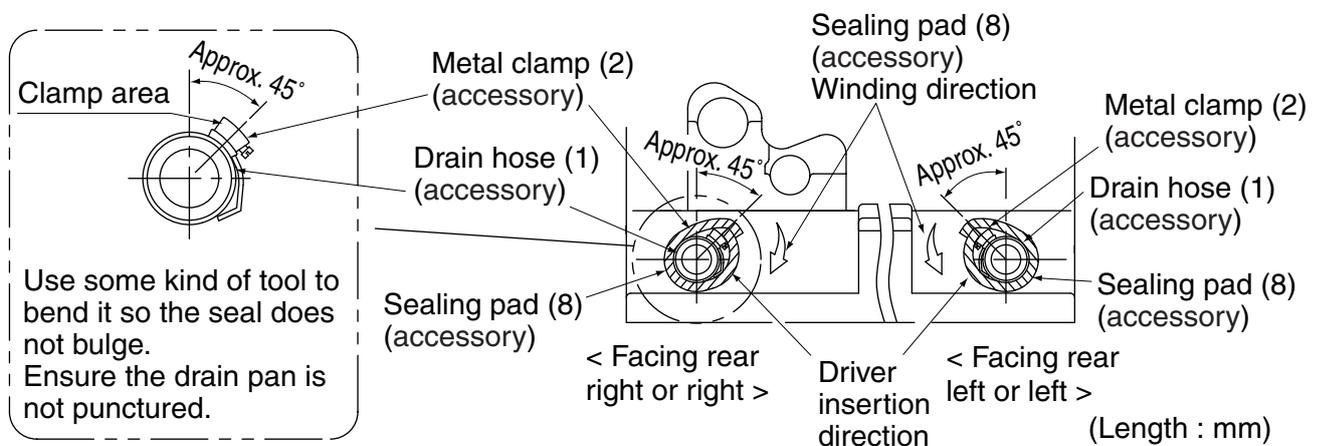


Fig. 22



- Be sure to insulate all drain piping running indoors.
- Do not allow any slack to gather in the drain hose inside the indoor unit. **(Refer to Fig. 23)**
(Slack in the drain hose can cause the suction grille to break.) (Slack in the drain hose can cause noise such as a bubbling sound.)
- Install the support fitting at intervals of 1 to 1.5 m without allowing any slack in the piping. **(Refer to Fig. 20)**
Block any gaps in the drain piping using putty and insulation material (field supply) to prevent dust from entering the indoor unit.
However, before running the piping and wiring for the remote controller through the same hole, complete "8. ELECTRIC WIRING WORK" and then fill the gap between the penetration lid and piping.

(2) Check to make sure the drain flows smoothly after piping is complete.

- Slowly pour 600 mL of drain-checking water into the drain pan through the air outlet.

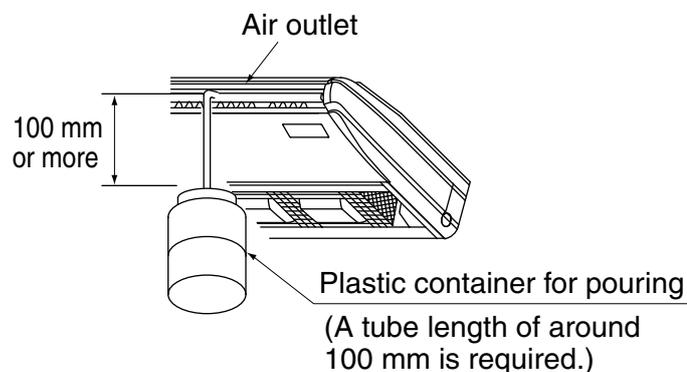
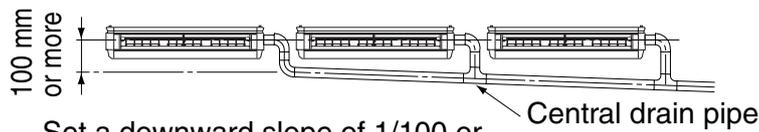


Fig. 24



Set a downward slope of 1/100 or greater to ensure that air does not accumulate.

Fig. 25

⚠ CAUTION

- Do not bend or twist the drain hose (1) provided to avoid applying an excessive force. (Applying an excessive force to the drain hose can cause water leakage.)
 - For the central drain piping installation, refer to the instructions shown in Fig. 25. Select the size of the central drain piping that matches the indoor unit to be connected. (Please refer to the technical guide.)
 - Drain piping connection:
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.
 - When installing the separately provided drain up kit, please refer to the installation manual provided with the drain up kit.
-

8. ELECTRIC WIRING WORK

- The electrical work must be performed by the personnel with qualification for electrical work, using the dedicated circuit.
- Make sure to install the earth leakage breaker on the indoor unit. (Installation of an earth leakage breaker is legally required to prevent electric shocks or fire.)
- The wiring between the outdoor unit and indoor unit follows 220-240V specifications.
- Do not turn off the power supply (for the outdoor unit) until all wiring work has been completed.
- A circuit breaker capable of shutting down power supply to the entire system must be installed.
- Be sure to ground 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, water pipes, lightning rods, or telephone earth wires.
 - Gas pipes: might cause explosions or fire if gas leaks.
 - Water pipes: 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 details of the electric wiring work, please also refer to the electrical wiring drawing name plates.
- Do not connect the electrical wiring to the terminal block for the remote controller wiring. Doing so may damage the whole system.
- For remote controller wiring details, refer to the installation manual attached to the remote controller.
- Do not touch the printed circuit board assy during the wiring operation. Doing so may damage the printed circuit board assy.

• **Specifications for field wire**

The remote controller cord is a field supply part. Please prepare the wiring with reference to the Table 3.

Table 3

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

NOTE 

1. Shows only in case of protected pipes. Use H07RN-F in case of no protection. (Sheath thickness: 1mm or more)
2. This length shall be the total extended length in the system of the group control.
3. Wiring specifications are shown on the condition that wiring has a voltage drop of 2%.

 **CAUTION**

- After the wiring connection, protect the wiring and wire routing sections.
- Prevent dust from entering into the unit by filling the gap between the conduits and the penetration lid (top or rear) with corking or putty.
- When the low current wires (remote controller cord) and high current wires (wiring between units and earth wiring) are led into the unit from the same position, electrical noise (foreign noise) occurs. This causes malfunction and breakdown of the devices.
- Remote controller cord and wiring between units should be located at least 50 mm from other electric wires. Not following this guideline may result in malfunction due to electrical noise.

Connection of wiring between units and for the remote control cord (Refer to Fig. 26)

- (1) Loosen the fixing screws (2 pcs.) while holding the control box lid, and then remove the control box lid.
- (2) Connect the wiring between units led in from the routing hole to the terminal block (X2M: 3P) while matching up the numbers (1 to 3), and then connect the earth wire to the earth terminal.
After this is done, use the fixture (11) clamp (4) provided to bind the wiring without applying tension to the connecting section of the wires. **(Refer to Fig. 28)**
- (3) Connect the remote controller code led in from the routing hole to the terminals (P₁ and P₂) of the terminal block (X1M: 4P). (There is no polarity.) **(Refer to Fig. 27)**
After this is done, use the fixture (11) clamp (4) provided to bind the wiring without applying tension to the connecting section of the wires. **(Refer to Fig. 28)**

 **WARNING**

During the wiring work, arrange the electric wiring to avoid detachment of the control box lid, and install the control box lid without catching any electric wires.

(Caught electric wires and detachment of the control box lid may result in electrical shock or fire.)

Fig. 26

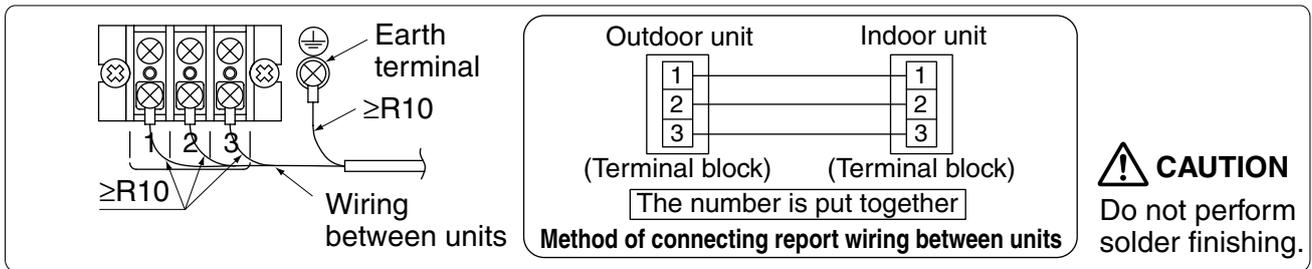
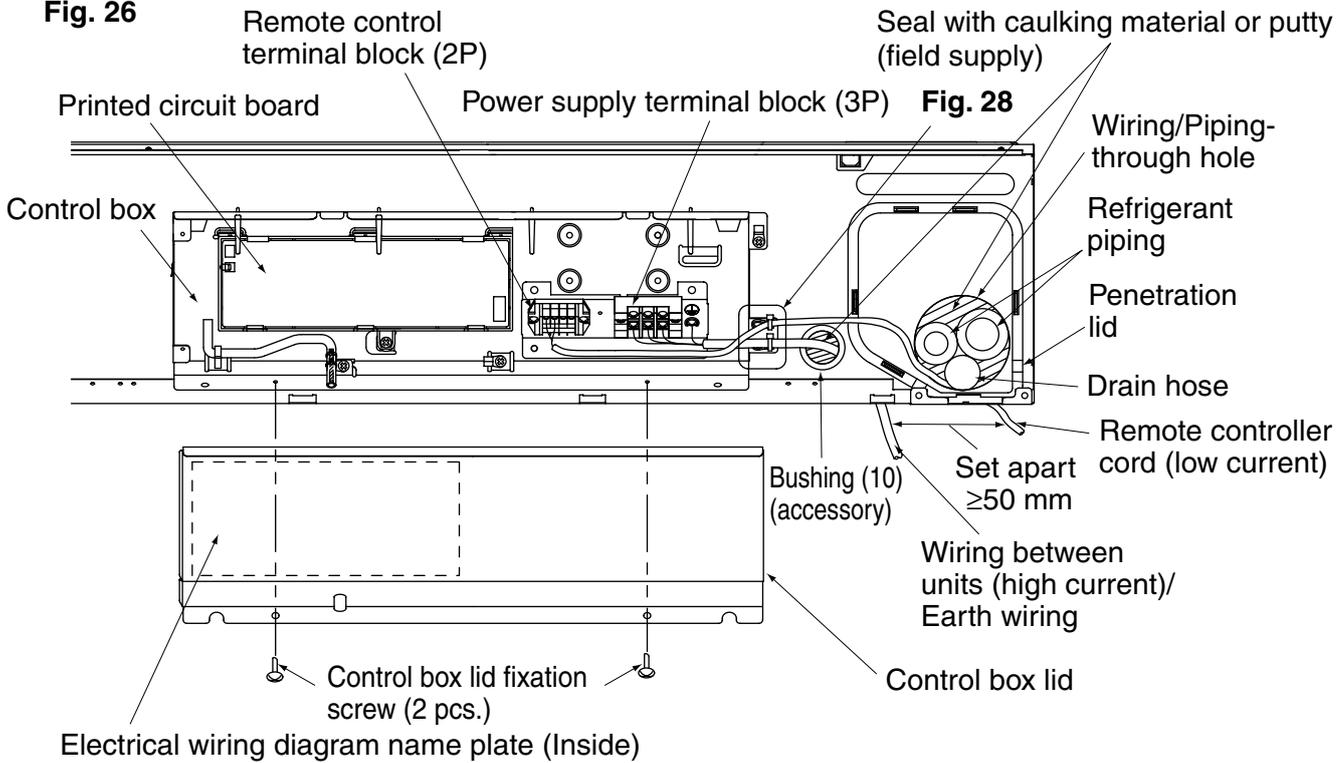
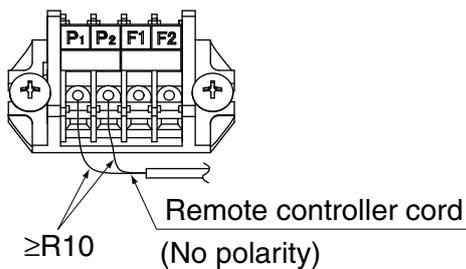


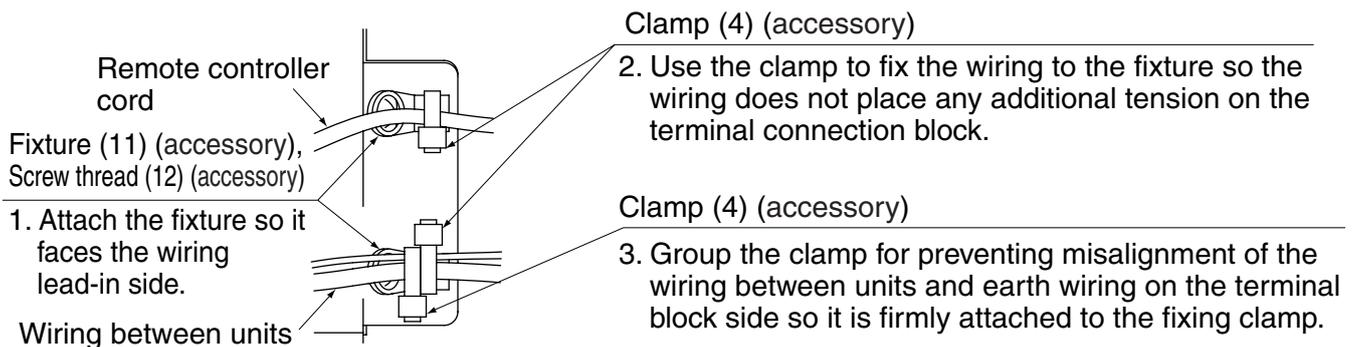
Fig. 27



- CAUTION**
- Do not connect the wiring between units (high current) under any circumstances.
 - Do not perform solder finishing.

How to connect remote control terminal block (2P)

Fig. 28



Observe the notes mentioned below when wiring to the terminals.

Tightening torque for the terminal screws.

- Use the correct screwdriver for tightening 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 below for the tightening torque of the terminal screws.

Terminal	Size	Tightening torque
Remote controller terminal block (2P)	M3.5	0.79 - 0.97 N•m
Power supply terminal block (3P)	M4	1.18 - 1.44 N•m
Earth terminal	M4	1.18 - 1.44 N•m

Precautions to be taken for power supply wiring

Use a round crimp-style terminal for connection to the power supply terminal block.

In case it cannot be used due to unavoidable reasons, be sure to observe the following instructions.

(Refer to Fig. 29)

- Do not connect wires of different gauge to the same power supply terminal. (Looseness in the connection may cause overheating.) **(Refer to Fig. 30)**
- When connecting wires of the same gauge, connect them according to. **(Refer to Fig. 30)**
- In wiring, make certain that prescribed wires are used, carry out complete connections, and fix the wires so that external forces are not applied to the terminals.

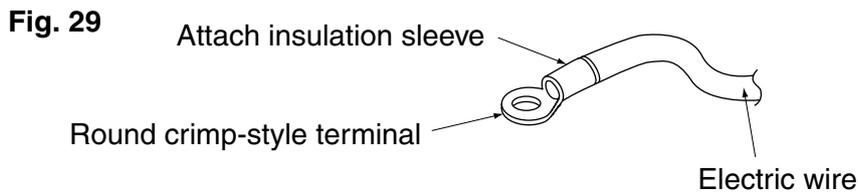
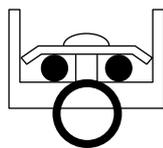


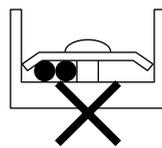
Fig. 30

Connect wires of the same gauge to both side. (GOOD)



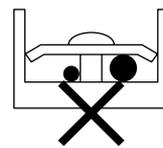
Good

Do not connect wires of the same gauge to one side. (WRONG)



Wrong

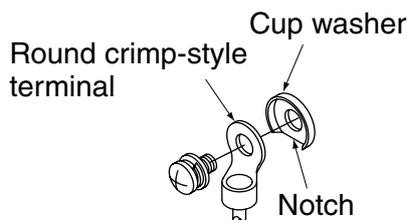
Do not connect wires of different gauges. (WRONG)



Wrong

Precautions to be taken for earth wiring

- Be sure to route the earth wire so it exits from the notch of the cup washer. (The earth wire may not contact the terminal block properly, reducing the earthing effect.)
- When a stranded wire is used, do not perform solder finishing.



9. WIRING EXAMPLE

⚠ CAUTION

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

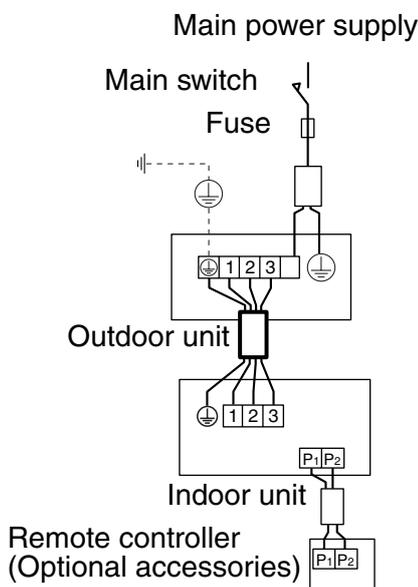
For the wiring of outdoor units, refer to the installation manual attached to the outdoor units.

Confirm the system type.

- **Pair type:** 1 remote controller controls 1 indoor unit. (standard system) **(Refer to Fig. 31)**
- **Group control:** 1 remote controller controls up to 16 indoor units. (All indoor units operate according to the remote controller) **(Refer to Fig. 32)**
- **2 remote controllers control:** 2 remote controllers control 1 indoor unit. **(Refer to Fig. 34)**

Fig. 31

Pair type



Details of standard wiring device

Indoor unit		
Earth wire (copper)	Wiring between units of indoor and outdoor units	
	Min. size	Length
2mm ² (φ16mm) or more	2mm ² (φ16mm)	50mm or less

* Also refer to the technical materials for the wiring specifications when the indoor units are connected.

<Cord usage restrictions>

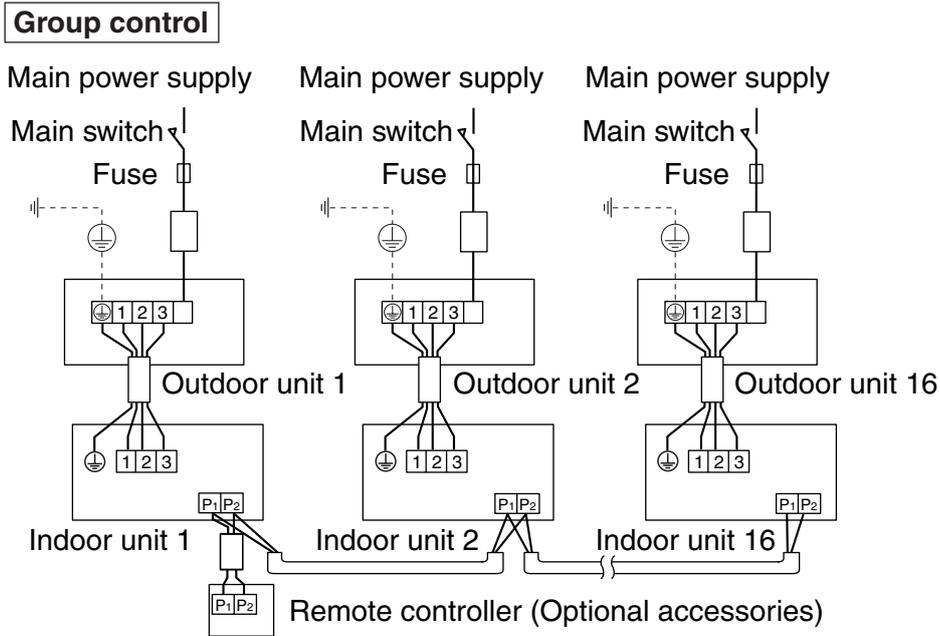
Do not use cords for wiring between units and power supply wiring.

Example: VCTF (not allowed), VV cable (allowed)

⚠ CAUTION

- Use an indoor unit that can detect typical indoor temperatures as the master unit.
An indoor unit with a remote controller connected is set as the master unit.
- Crossover wiring is not necessary for the remote control terminal (P₁ P₂). (Do not connect it to the same breaker.)

Fig. 32



9-1 When implementing group control

- When using as a pair unit or as a master unit for simultaneous operation multi, you may simultaneous start/stop (group) control up to 16 unit with the remote controller.
- In this case, all the indoor units in the group will operate in accordance with the group control remote controller.
- Select a remote controller which matches as many of the functions (swing flap, etc.) in the group as possible.

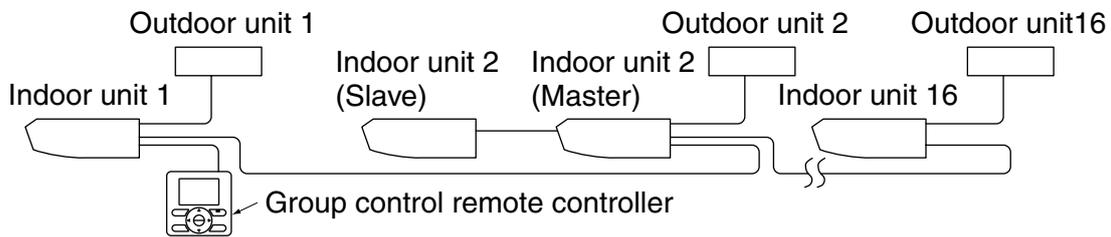
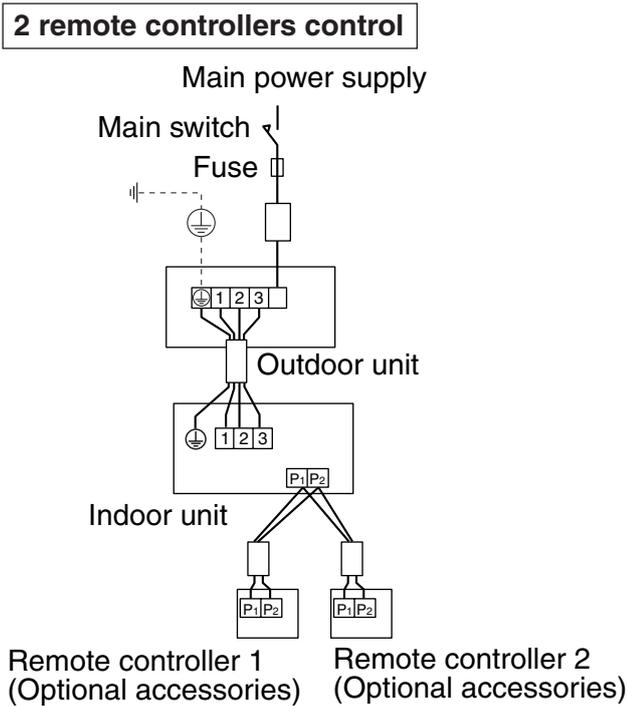


Fig. 33

Wiring Method

- (1) Remove the control box lid. (Refer to Fig. 26)
- (2) **Cross-wire the remote control terminal block (P₁ P₂) inside the control box. (There is no polarity.) (Refer to Fig. 32 and Table 3)**

Fig. 34



9-2 2 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

- The settings of the BRC1E51A7 remote controller should be switched while referring to the manual supplied with the remote controller.
The settings of the BRC1D528 remote controller should be switched in accordance with the following procedure.

- (1) Insert a ⊖ screwdriver into the recess between the upper and lower part of remote controller and, working from the 2 positions, pry off the upper part. (The remote controller PC board is attached to the upper part of remote controller.) **(Refer to Fig. 35)**
- (2) Turn the **main/sub changeover** switch on one of the two remote controller PC boards to “S”. (Leave the switch of the other remote controller set to “M”.) **(Refer to Fig. 36)**

Fig. 35

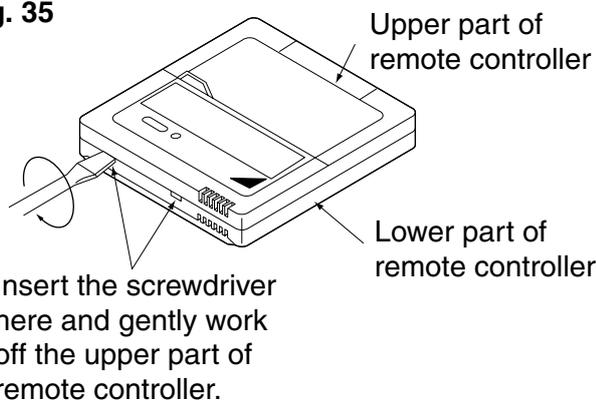
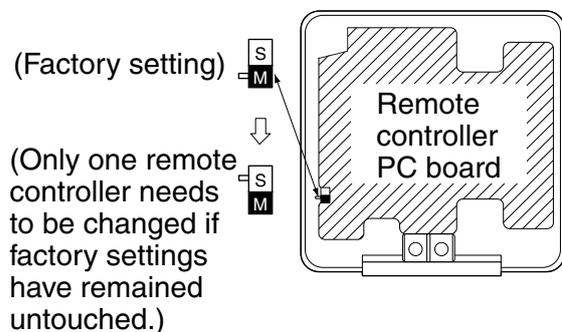


Fig. 36

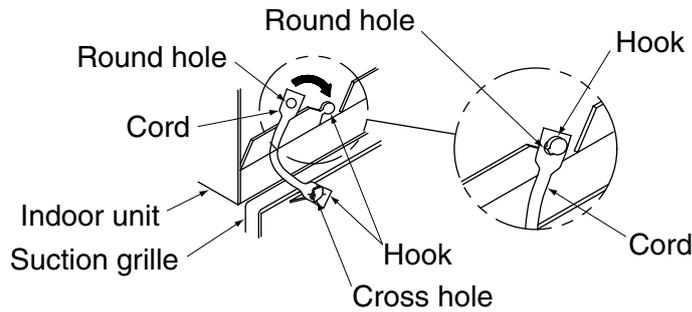


Wiring Method

- (3) Remove the control box lid. **(Refer to Fig. 26)**
- (4) **Add remote controller 2 to the remote control terminal block (P₁, P₂) in the control box. (There is no polarity.) (Refer to Fig. 34 and Table 3)**

10. ATTACHING THE SUCTION GRILLE AND THE DRESSING BOARDS

- Once wiring is complete, firmly attach the dressing side board by reversing the steps taken to remove the suction grille.
- Install the suction grille while hanging the cord of the suction grille on the hook of the indoor unit as shown below.



CAUTION

The cord may be caught when the suction grille is closed. Before closing the suction grille, check that the cord does not protrude from the side of the suction grille.

11. FIELD SETTINGS

(1) Make sure the control box lids are closed on the indoor and outdoor units.

(2) After power is supplied, use the remote controller to perform field setting according to the installation conditions.

- For details of the wired remote controller, please refer to the “Field setting procedure” in the installation manual provided with the remote controller.
- Address setting is necessary for the wireless remote controller. Refer to the installation manual provided with the wireless remote controller.

(3) Settings can be made by changing “Mode No.,” “FIRST CODE NO.,” and “SECOND CODE NO.”.

- The setting is made collectively for a group. In order to set each indoor unit individually and perform checks after the setting, specify the mode number in parenthesis.

(4) Do not perform settings that are not listed in the table.

11-1 Setting ceiling height (Type 100 or less)

- When installing unit type 71 or 100, specify the SECOND CODE NO. in accordance with the ceiling height as shown “Table 4”.

(The SECOND CODE NO. is set to “01” (standard) at the factory.)

Table 4

	Ceiling height (m)		Mode No.	FIRST CODE NO.	SECOND CODE NO.
	Type 71	Type 100			
Standard	Less than 2.7 m	Less than 3.8 m	13 (23)	0	01
High ceiling	2.7 to 3.5	3.8 to 4.3			02

NOTE

- Do not perform settings that are not listed in the table.

11-2 Settings for options

- For settings for options, see the installation instructions provided with the option.

11-3 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 5” depending on the amount of dirt or dust in the room. (SECOND CODE NO. is factory set to “01” for air filter contamination-light.)

Table 5

Setting	Spacing time of display air filter sign (long life type)	Mode No.	FIRST CODE NO.	SECOND CODE NO.
Air filter contamination-light	Approx. 2500 hrs	10 (20)	0	01
Air filter contamination-heavy	Approx. 1250 hrs			02

NOTE

1. 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 number in parenthesis.
 2. Do not perform settings that are not listed in the table.
- In addition to the necessity for periodic cleaning of the filter, explain to the customer about the specified time intervals of the cleaning. Regular cleaning is required to prevent clogging, even though a long life type filter is provided as a standard part.

11-4 Air flow rate setting when the thermo system is OFF

- Set the appropriate value for the usage conditions following discussions with the customer. (As the factory setting, the air flow rate to be used while the cooling thermo system is OFF is assigned to SECOND CODE NO. “02”, and to “01” for other rates.)

Table 6

Setting		Mode No.	FIRST CODE NO.	SECOND CODE NO.
The fan stops when the thermo system turns OFF (cooling/heating)	Normal	11 (21)	2	01
	Stop			02
Air flow rate while the cooling thermo system is OFF	LL air flow rate	12 (22)	6	01
	Preset air flow rate			02
Air flow rate while the heating thermo system is OFF	LL air flow rate	12 (22)	3	01
	Preset air flow rate			02

NOTE

1. 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 number in parenthesis.
2. Do not perform settings that are not listed in the table.

12. TEST OPERATION

- The settings of the BRC1E51A7 remote controller should be switched while referring to the manual supplied with the remote controller.
The settings of the BRC1D528 remote controller should be switched in accordance with the following procedure.
- Make sure that the 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.
- After completing the refrigerant piping, drain piping, and electrical wiring, clean the interior of the indoor unit, dressing board, and suction grille. 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 personnel with appropriate electrical qualifications.)

- During the test operation, confirm that the air flow direction and air flow rate are set as specified.
- If the interior finishing work is not completed upon completion of the test operation, inform the customer that practical operation must not be performed until the interior finishing work is completed. This is necessary in order to protect the indoor unit. (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 “12-2 Cautions for servicing”.
- After completing the test run, press the INSPECTION/TEST OPERATION run button once to put the unit into inspection mode, and make sure the malfunction code is “00”. (=normal).

12-1 Test operation

1. Open the gas side stop valve.
2. Open the liquid side stop valve.
3. Electrify crank case heater for 6 hours. (Not required in case of a unit exclusively designed for cooling only)
4. Set to cooling operation with the remote controller and start operation by pushing ON/OFF button ().
5. Press INSPECTION/TEST OPERATION button 4 times () (2 times for wireless remote controller) and operate at Test Operation mode for 3 minutes.
6. Push AIR FLOW DIRECTION ADJUST button () to make sure the unit is in operation.
7. Press INSPECTION/TEST OPERATION button () and operate normally.
8. Confirm function of unit according to the operation manual.

PRECAUTIONS

1. Refer to “12-2 Cautions for servicing” if the unit does not operate properly.
2. After completing the test run, press the INSPECTION/TEST OPERATION run 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 “12-2 Cautions for servicing”.

NOTE

- If a malfunction is preventing operation, refer to the malfunction diagnoses below.

12-2 Cautions for servicing

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

- If the air conditioner does not operate normally after installing the air conditioner, a malfunction shown in the table below may happen.

Remote control display	Malfunction
No display	<ul style="list-style-type: none"> • Power supply trouble or Open phase connection • Wrong wiring between indoor and outdoor unit • Indoor PC board faulty • Wrong remote control connection wiring • Remote control faulty • Fuse faulty
88*	<ul style="list-style-type: none"> • Indoor PC board faulty • Wrong wiring between indoor and outdoor unit
88 flashing	<ul style="list-style-type: none"> • Wrong wiring between indoor and outdoor unit

* After turning on the power, the maximum is 90 seconds, although it will only display “88”. This is not a problem, and it will be set for 90 seconds.

■ Trouble shooting with the display on the liquid crystal display remote controller.

1. With the wired remote controller. (NOTE 1)

When the operation stops due to trouble, operation lamp flashed, and “  ” and the malfunction code are indicated on the liquid crystal display. In such a case, diagnose the fault contents by referring to the table on the malfunction code list in case of group control, the unit No. is displayed so that the indoor unit No. with the trouble can be recognized. (NOTE 2)

2. With the wireless remote controller.

(Refer also 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 malfunction code list looking for the malfunction 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. In case wired remote controller. Press the INSPECTION /TEST OPERATION button on remote controller, “” starts flashing.
2. Keep down the ON/OFF button for 5 seconds or longer in the inspection mode and the above trouble history disappears, after the trouble code goes on and off twice, followed by the code “00”(normal). The display changes from the inspection mode to the normal mode.

12-3 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.

Code	Malfunction/Remarks
A1	Indoor unit's PC board faulty
A3	Drain water level abnormal
A6	Indoor fan motor overloaded, overcurrent or locked
A7	Louver lock motor malfunction
AF	Humidifier faulty
AH	Air cleaner faulty
	Only the air cleaner does not function.
AJ	Type set improper
	Capacity data is wrongly preset. Or there is nothing programmed in the data hold IC.
C4	Sensor (R2T) for heat exchanger temperature is fault
C5	Sensor (R3T) for heat exchanger temperature is fault
C9	Sensor for suction air temperature is fault
CC	Humidity sensor system malfunction
CJ	Sensor for remote controller is fault
	The remote controller thermistor does not function, but the system thermo run is possible.
E0	Action of safety device (outdoor unit)
E1	Outdoor unit's PC board faulty
E3	High pressure abnormal(outdoor unit)
E4	Low pressure abnormal (outdoor unit)
E5	Compressor motor lock malfunction
E7	Outdoor fan motor lock malfunction
	Outdoor fan instantaneous overcurrent malfunction
E9	Electronic expansion valve faulty (outdoor unit)
F3	Discharge pipe temperature abnormal (outdoor unit)
H3	High pressure switch faulty (outdoor unit)
H7	Outdoor motor position signal malfunction
H9	Outdoor air thermistor faulty (outdoor unit)
J1	Pressure sensor system malfunction (outdoor unit)

J2	Current sensor system malfunction (outdoor unit)
J3	Discharge pipe thermistor faulty (outdoor unit)
J5	Suction pipe thermistor faulty (outdoor unit)
J6	Heat exchanger thermistor faulty (outdoor unit)
J7	Heat exchanger (2) thermistor faulty (outdoor unit)
J8	Liquid piping thermistor malfunction (heating) (outdoor)
J9	Gas piping thermistor malfunction (cooling) (outdoor)
JA	Discharge pipe pressure sensor system malfunction (outdoor unit)
JC	Intake pipe pressure sensor system malfunction (outdoor unit)
L1	INV system malfunction (outdoor unit)
L3	Reactor thermistor malfunction (outdoor unit)
L4	Overheated heat-radiating fin (outdoor)
	Inverter cooling defect.
L5	Instantaneous overcurrent (outdoor)
	Possible earth fault or short circuit in the compressor motor.
L8	Electric thermal (outdoor)
	Possible electrical overload in the compressor or cut line in the compressor motor.
L9	Stall prevention (outdoor)
	Compressor possibly locked.
LC	Transmission malfunction between the outdoor control units' inverters (outdoor)
P1	Open-phase or main circuit low voltage (outdoor)
P3	PC-board temperature sensor malfunction (outdoor)
P4	Heat-radiating fin temperature sensor malfunction (outdoor)
PJ	Type set improper (outdoor unit)
	Capacity data is wrongly preset. Or there is nothing programmed in the data hold IC.
U0	Suction pipe temperature abnormal or refrigerant shortage
U1	Reverse phase
	Reverse two of the L1,L2and L3 leads.
U2	Power source voltage malfunction
	Includes the defect in 52C.
U4 UF	Transmission error (indoor unit – outdoor unit)
	Incorrect wiring between indoor and outdoor units or malfunction of the PC board mounted on the indoor and the outdoor units. If UF is shown, the wiring between the indoor and outdoor units is not properly wired. Therefore, immediately disconnect the power supply and correct the wiring. (The compressor and the fan mounted on the outdoor unit may start operation independent of the remote controller operation.)
U5	Transmission error (indoor unit – outdoor unit)
	Transmission is improper between the indoor unit and the remote controller.
U8	Malfunction in transmission between main and sub remote controls. (Malfunction in sub remote control.)
UA	Miss setting for multi system
	Setting is wrong for selector switch of multi-system. (see switch SS2 on the main unit's PC board)
	Incorrect combination with indoor unit and outdoor unit
UC	Central control address overlapping
UE	Transmission error (indoor unit – centralized remote controller)
UJ	Accessory equipment transmission error

NOTE 

- After the test operation is completed, check “b. Items to be checked at time of delivery” on 4 page.

CAUTION

If the interior finishing work is not completed upon completion of the test operation, inform the customer that practical operation must not be performed until the interior finishing work is completed. This is necessary in order to protect the product.

If the unit is operated under this condition, paint, glue, and other materials used during the interior finishing work will contaminate the product. This may cause water splashes or leakage.



Precautions for test run operators

Before the delivery to the customer upon completion of the test operation, make sure that the control box lids are closed. Inform the customer of the state (power ON/OFF) of the power circuit breaker.

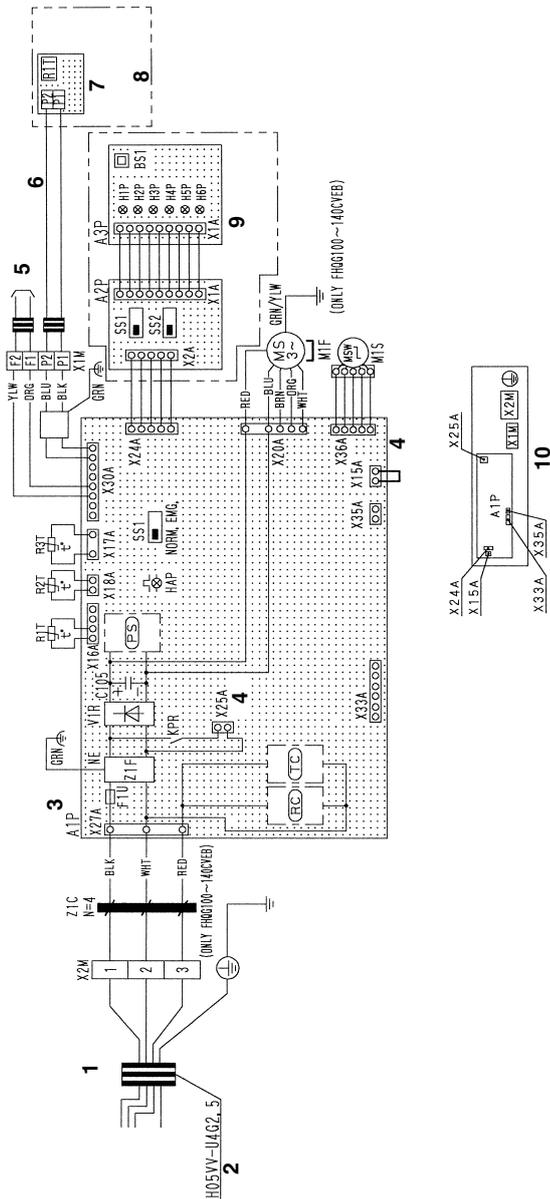
13. WIRING DIAGRAM

(Refer to Fig. 37)

1	TO OUTDOOR UNIT (NOTE 2)	2	(NOTE 7)
3	INDOOR UNIT	4	(NOTE 4)
5	TRANSMISSION WIRING CENTRAL REMOTE CONTROLLER	6	(NOTE 3)
7	WIRED REMOTE CONTROLLER (OPTIONAL ACCESSORY)	8	(NOTE 5)
9	WIRELESS REMOTE CONTROLLER (RECEIVER/DISPLAY UNIT) (OPTIONAL ACCESSORY)	10	CONTROL BOX

INDOOR UNIT		H3P	LIGHT EMITTING DIODE (FILTER SIGN-RED)
A1P	PRINTED CIRCUIT BOARD	H4P	LIGHT EMITTING DIODE (DEFROST-ORANGE)
C105	CAPACITOR (M1F)	H5P	LIGHT EMITTING DIODE (ELEMENT WASHING-RED)
F1U	FUSE (T, 3.15A, 250V)	H6P	LIGHT EMITTING DIODE (VENTILATION CLEAN-GREEN)
HAP	LIGHT EMITTING DIODE (SERVICE MONITOR GREEN)	SS1	SELECTOR SWITCH (MAIN/SUB)
KPR	MAGNETIC RELAY (M1F)	SS2	SELECTOR SWITCH (WIRELESS ADDRESS SET)
M1F	MOTOR (INDOOR FAN)	CONNECTOR FOR OPTIONAL PARTS	
M1S	MOTOR (SWING FLAP)	X15A	CONNECTOR (FLOAT SWITCH)
R1T	THERMISTOR (AIR)	X24A	CONNECTOR (WIRELESS REMOTE CONTROLLER)
R2P/R3T	THERMISTOR (COIL)	X25A	CONNECTOR (DRAIN PUMP)
SS1	SELECTOR SWITCH (EMERGENCY)	X39A	CONNECTOR (ADAPTOR FOR WIRING)
V1R	DIODE BRIDGE	X35A	CONNECTOR (GROUP CONTROL ADAPTOR)
X1M	TERMINAL BLOCK		
X2M	TERMINAL BLOCK		
Z1F	NOISE FILTER		
Z1C	FERRITE CORE (NOISE FILTER)		
(FS)	POWER SUPPLY CIRCUIT		
(RC)	SIGNAL RECEIVER CIRCUIT		
(TC)	SIGNAL TRANSMISSION CIRCUIT		
WIRED REMOTE CONTROLLER			
R1T	THERMISTOR (AIR)		
WIRELESS REMOTE CONTROLLER (RECEIVER/DISPLAY UNIT)			
A2P	PRINTED CIRCUIT BOARD		
A3P	PRINTED CIRCUIT BOARD		
BS1	PUSH BUTTON (ON/OFF)		
H1P	LIGHT EMITTING DIODE (ON-RED)		
H2P	LIGHT EMITTING DIODE (TIMER-GREEN)		

WIRING DIAGRAM



NOTES

1. □□□□ : TERMINAL □□□□ : CONNECTOR □□□□ : FIELD WIRING
2. MODEL OUTDOOR UNIT SHOWN IN THIS DIAGRAM SHOWS THE OUTLINE OF PRODUCT. FOR THE DETAIL, SEE WIRING DIAGRAM ATTACHED TO OUTDOOR UNIT.
3. IN CASE USING CENTRAL REMOTE CONTROLLER, CONNECT IT TO THE UNIT IN ACCORDANCE WITH THE ATTACHED INSTALLATION MANUAL.
4. X15A, X25A ARE CONNECTED WHEN THE DRAIN UP KIT IS BEING USED. IN ACCORDANCE WITH THE ATTACHED INSTALLATION MANUAL.
5. IN CASE OF MAIN/SUB CHANGEOVER. SEE THE INSTALLATION MANUAL ATTACHED TO REMOTE CONTROLLER.
6. SYMBOLS SHOWS AS FOLLOWS : BLK: BLACK RED: RED BLU: BLUE WHT: WHITE PNK: PINK YLW: YELLOW GRY: GRAY GRN: GREEN ORG: ORANGE BRN: BROWN.
7. SHOWS ONLY IN CASE OF PROTECTED PIPES. USE H07RN-F IN CASE OF NO PROTECTION.

