

SPLIT SYSTEM**Air Conditioners**

English

Deutsch

Français

Español

Italiano

Ελληνικά

Nederlands

Portugues

Русский

Türkçe

MODELS
(Floor standing type)

FVQ71BV1B
FVQ100BV1B
FVQ125BV1B

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

LESEN SIE DIESE ANWEISUNGEN VOR DER INSTALLATION SORGFÄLTIG DURCH.
BEWAHREN SIE DIESE ANLEITUNG FÜR SPÄTERE BEZUGNAHME GRIFFBEREIT AUF.

LIRE SOIGNEUSEMENT CES INSTRUCTIONS AVANT L'INSTALLATION.
CONSERVER CE MANUEL A PORTEE DE MAIN POUR REFERENCE ULTERIEURE.

LEA CUIDADOSAMENTE ESTAS INSTRUCCIONES ANTES DE INSTALAR.
GUARDE ESTE MANUAL EN UN LUGAR A MANO PARA LEER EN CASO DE TENER
ALGUNA DUDA.

PRIMA DELL'INSTALLAZIONE LEGGERE ATTENTAMENTE QUESTE ISTRUZIONI.
TENERE QUESTO MANUALE A PORTATA DI MANO PER RIFERIMENTI FUTURI.

ΔΙΑΒΑΣΤΕ ΠΡΟΣΕΚΤΙΚΑ ΑΥΤΕΣ ΤΙΣ ΟΔΗΓΙΕΣ ΠΡΙΝ ΑΠΟ ΤΗΝ ΕΓΚΑΤΑΣΤΑΣΗ ΕΧΕΤΕ ΑΥΤΟ
ΤΟ ΕΓΧΕΙΡΙΔΙΟ ΕΥΚΑΙΡΟ ΓΙΑ ΝΑ ΤΟ ΣΥΜΒΟΥΛΕΥΕΣΤΕ ΣΤΟ ΜΕΛΛΟΝ.

LEES DEZE INSTRUCTIES ZORGVULDIG DOOR VOOR INSTALLATIE. BEWAAR DEZE HAN-
DLEINDING WAAR U HEM KUNT TERUGVINDEN VOOR LATERE NASLAG.

LEIA COM ATENÇÃO ESTAS INSTRUÇÕES ANTES DE REALIZAR A INSTALAÇÃO.
MANTENHA ESTE MANUAL AO SEU ALCANCE PARA FUTURAS CONSULTAS.

ПЕРЕД НАЧАЛОМ МОНТАЖА ВНИМАТЕЛЬНО ОЗНАКОМЬТЕСЬ С ДАННЫМИ
ИНСТРУКЦИЯМИ. СОХРАНИТЕ ДАННОЕ РУКОВОДСТВО В МЕСТЕ, УДОБНОМ ДЛЯ
ОБРАЩЕНИЯ В БУДУЩЕМ.

MONTAJDAN ÖNCE BU TALİMATLARI DİKKATLİ BİR BİÇİMDE OKUYUN.
GELECEKTE BAŞVURMAK ÜZERE BU ELKİTABINI KOLAY ULAŞABİLECEĞİNİZ BİR YERDE
MUHAFAZA EDİN.

DAIKIN INDUSTRIES, LTD.

- (I) FHY35BJV1, FHY45BJV1, FHY60BJV1, FHY71BJV1, FHY100BJV1, FHY125BJV1, FH35BJV1, FH45BJV1, FH60BJV1
- (II) FHY35BV1, FHY45BV1, FHY60BV1, FHY71BV1, FHY100BV1, FHY125BV1, FH35BV1, FH45BV1, FH60BV1
- (III) FHQ35BUV1B, FHQ50BUV1B, FHQ60BUV1B, FHQ71BUV1B, FHQ100BUV1B, FHQ125BUV1B
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FAQ71BUV1B, FAQ100BUV1B, FAQ71BVV1B, FAQ100BVV1B
FVQ71BUV1B, FVQ100BUV1B, FVQ125BV1B

EN60335-2-40,

Low Voltage 2006/95/EC
Machinery Safety 98/37/EC
Electromagnetic Compatibility 2004/108/EC

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<A>	DAIKIN.TCF.004	DAIKIN.TCF.016	DAIKIN.TCF.021
	KEMA	KEMA	KEMA
<C>	59277-KRQ/ ECM95-4233	81728-KRQ/ ECM98-4341	2024351-QUA/ EMC02-4565



N. Murata

Noboru Murata
Manager Quality Control Department
Sakai, 1st of January 2008

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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 accessible 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.
- 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 terminal box lid can be securely fastened.
Improper positioning of the terminal 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.
 - Do not directly touch refrigerant that has leaked from refrigerant pipes or other areas, as there is a danger of frostbite.
 - 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.
-



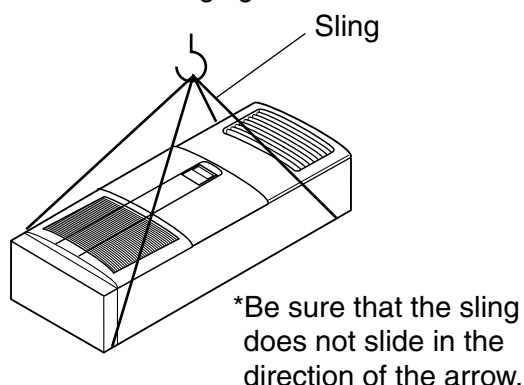
CAUTION

- 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.
-

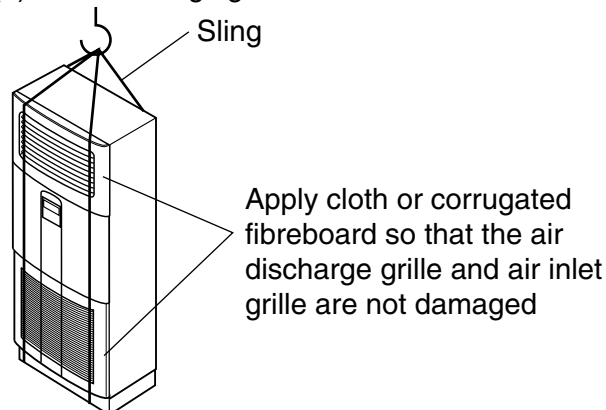
2. BEFORE INSTALLATION

- The accessories needed for installation must be retained in your custody until the installation work is completed. Do not discard them!
- Decide upon a line of transport.
- When transporting by hanging the unit, use a sling of soft material as shown below.

(1) Horizontal hanging



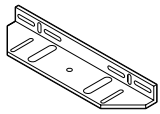
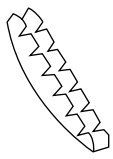

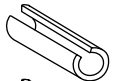
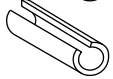
(2) Vertical hanging

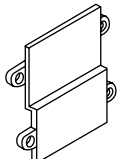
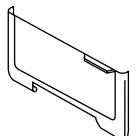
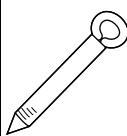
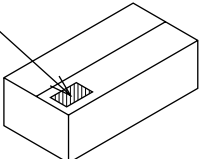


- When moving the unit at or after opening, do not apply force to plastic parts.
- When selecting installation site, refer to the paper pattern (part of packaging material).
- For the installation of an outdoor unit, refer to the installation manual attached to the outdoor unit.

1. ACCESSORIES

Check the following accessories are included with the unit.

Name	Bracket for installation	Through hole protecting rubber	Bush	Insulation for fitting
Quantity	1 set	2 pcs.	1 pc.	1 each
Shape	(1)  (Attached to the top panel)	(2) 	(3) 	(4) For gas pipe  (5) For liquid pipe 

Name	Control panel patch plate	Remote controller lid	Clamp	Installation pattern	(Other)
Quantity	1 pc.	1 pc.	5 pcs.	1 pc.	(10) Operation manual
Shape	(6) 	(7) 	(8) 	(9)  (Part of packing material)	(11) Installation manual (12) Screws (M5 x 12, 2 pcs.)

2. OPTIONAL ACCESSORIES

- When the indoor unit is to be controlled by two remote controllers (refer to “FIELD SETTING”), install them on an adequate place, referring to the related technical information.
(As for the installation procedure, follow the instruction in “Remote controller installation procedure” attached to the remote controller.)

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 and outdoor unit fixed firmly?	The unit may drop, vibrate or make noise.	
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?	Dangerous at electric leakage.	
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.	

2. Items to be checked at time of delivery *Also review the "SAFETY PRECAUTIONS"

Items to be checked	Check
Did you explain about operations while showing the instruction manual to your customer?	
Did you hand the instruction manual over to your customer?	

Points for explanation about operations

The items with \triangle WARNING and \triangle 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.

3. NOTE TO THE INSTALLER

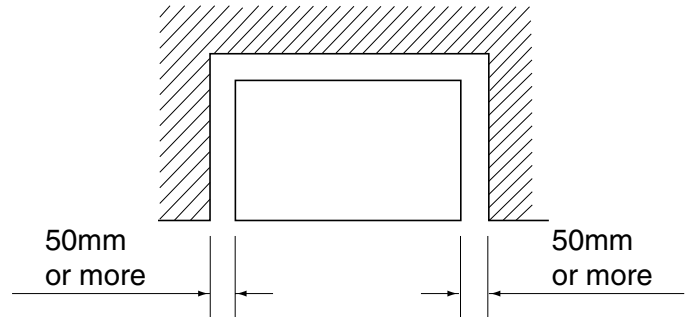
Be sure to instruct customers how to properly operate the unit (especially operating different functions, and adjusting the temperature) by having them carry out operations themselves while looking at the manual.

3. SELECTING INSTALLATION SITE

Select an installation site where the following conditions are satisfied after obtaining your customer's approval.

- Where optimum air distribution can be ensured.
- Where nothing blocks the air inlet and outlet, and where sufficient clearance for maintenance and service can be ensured.
- Where condensate can be properly drained.
- Where the floor is strong enough to bear the indoor unit weight.
- Make sure that the floor is not remarkably tilted.
- Where there is no risk of flammable gas leakage.
- Where piping between indoor and outdoor units is possible within the allowable limit. (Refer to the installation manual for the outdoor unit.)
- Keep indoor unit, outdoor unit, power supply wiring and transmission wiring at least 1 meter away from televisions and radio receivers. This is to prevent image interference and noise in those electrical appliances.

(Noise may be generated depending on the conditions under which the electric wave is generated, even if 1 meter is kept.)



4. INDOOR UNIT INSTALLATION

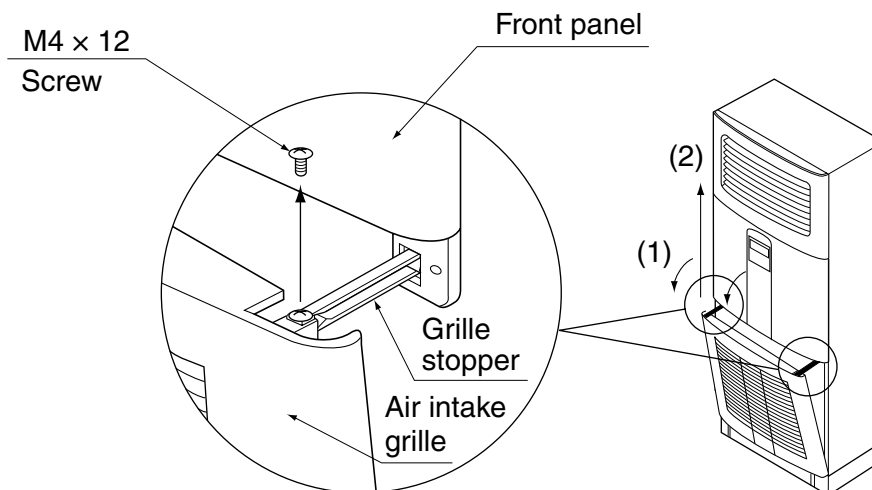
As for the parts to be used for installation work, be sure to use the provided accessories and specified parts designated by our company.

〈Fixing procedure〉

- Fix the indoor unit by using embedded bolt, etc. to prevent falling down of the vertically-long shaped unit.

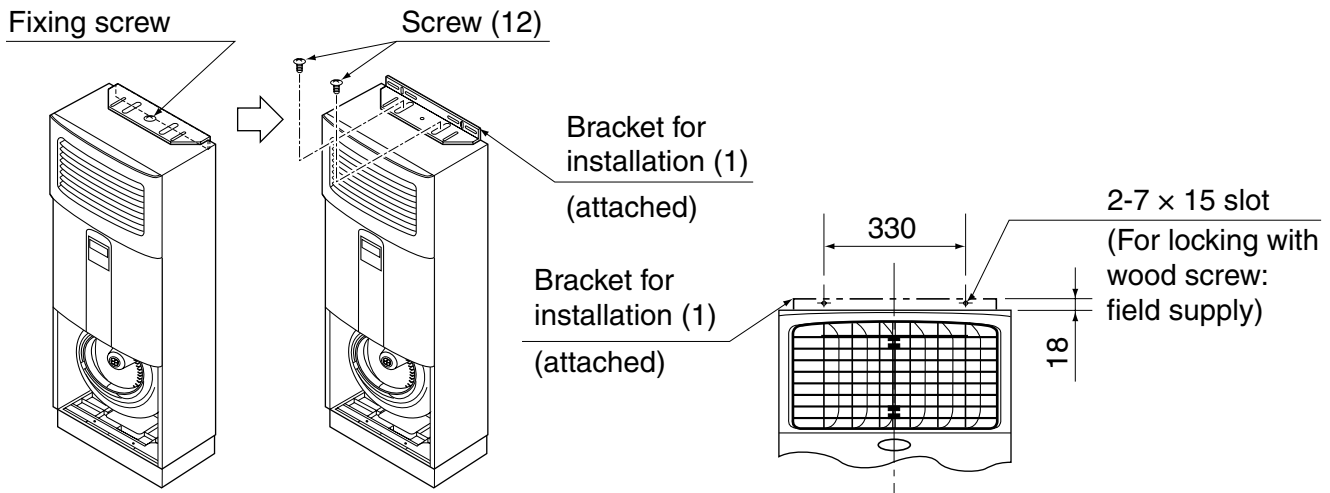
1. Detach the air intake grille.

Remove the screws (R & L, total 2) locking the grille stopper. Then, (1) lean the grille forward you, and (2) lift upward and out.



2. In case of normal installation site.

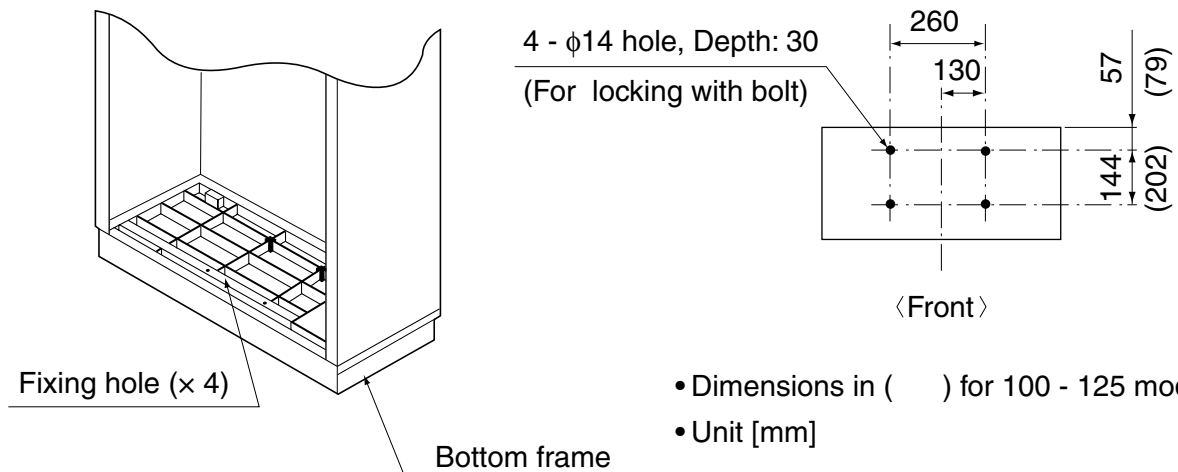
Loosen the fixed screw and remove the bracket for installation (1) tentatively attached to the top panel. Fix the bracket with the attached screws (12) to the top panel as shown in the figure. Then fix the indoor unit to the wall surface with wood screws (field supply).



3. In the case of earthquake endurance installation site.

Perform the fixing procedure above and also fix the bottom frame. Fix the indoor unit to the floor with anchor bolts (to be locally procured) using fixing holes (×4) on the bottom frame.

- Use the locations indicated on the installation pattern (9) (part of packing material).



- Dimensions in () for 100 - 125 models
- Unit [mm]

5. 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. (20mm or thicker) Condensation may form on the surface of the insulating material.⟩

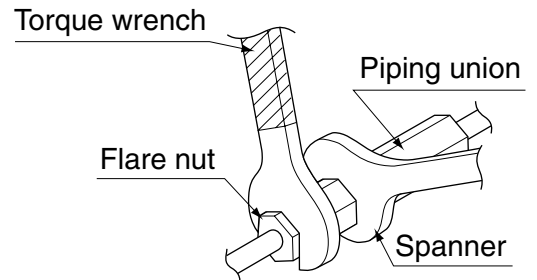
⟨Before refrigerant piping work, check which type of refrigerant is used. Proper operation is not possible if the types of refrigerant are not the same.⟩

⚠ CAUTION

- Use a pipe cutter and flare suitable for the type of refrigerant.
- Apply ester oil or ether oil around the flare section before connecting.
- 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.

- The outdoor unit is charged with refrigerant.
- Use copper alloy seamless pipes (ISO 1337).
- 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. 1)**
- Refer to “Table 1” 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. 2)**

Fig. 1



NOTE

- Use the flare nut included with the unit main body.

⚠ CAUTION

Do not let oil get on the screw holders on the dressing board. Oil can weaken the screw holders.

Fig. 2

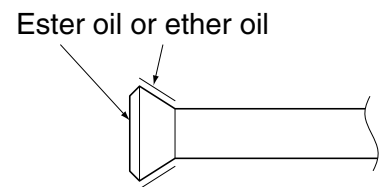


Table 1

Pipe size	Tightening torque	Flare dimensions A (mm)	Flare
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	

- Refer to “Table 1” to determine the proper tightening torque.

⚠ CAUTION

Overtightening may damage the flare and cause a refrigerant leakage.

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:

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

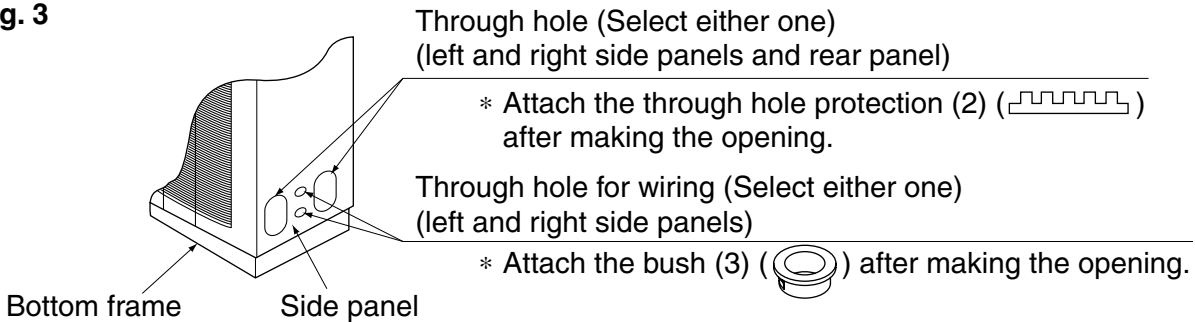
1. How to rig refrigerant piping.

- Detach the pipe retainer.

〈 In the case of left or right piping 〉

1. Open the holes on the right (left) side panel. **(Refer to Fig. 3)**
2. Pass refrigerant pipes, drain pipes, and unit wiring through the hole on the side panel.

Fig. 3

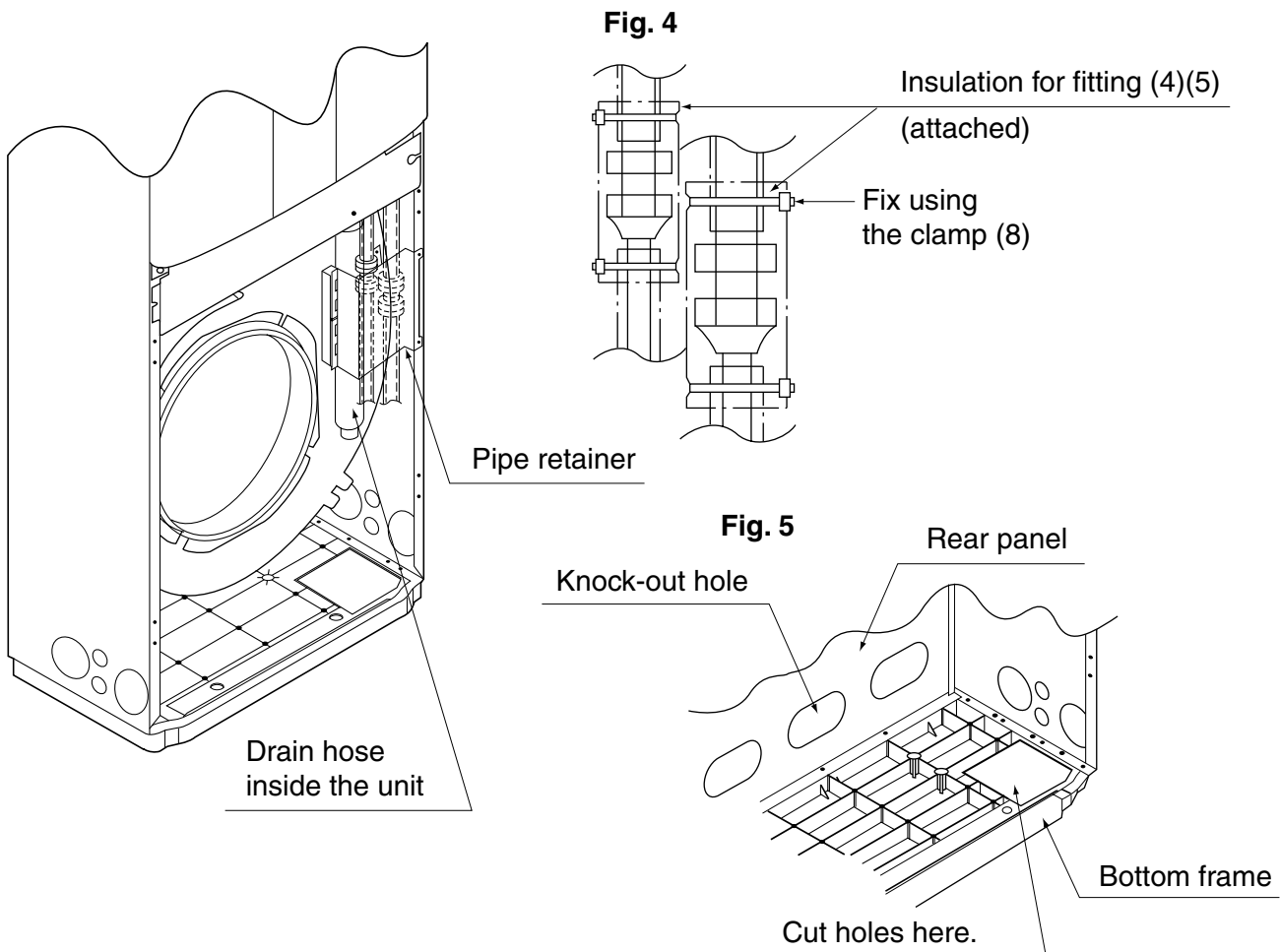


〈 In the case of rear piping 〉

1. Open the holes on the rear panel. **(Refer to Fig. 5)**
2. Pass refrigerant pipes, drain pipes, and unit wiring through the hole on the rear panel.

〈 In case of downward piping 〉

1. Cut holes in the indicated area of the bottom frame. **(Refer to Fig. 5)**
2. Pass refrigerant pipes, drain pipes, and unit wiring through the hole on the bottom frame.

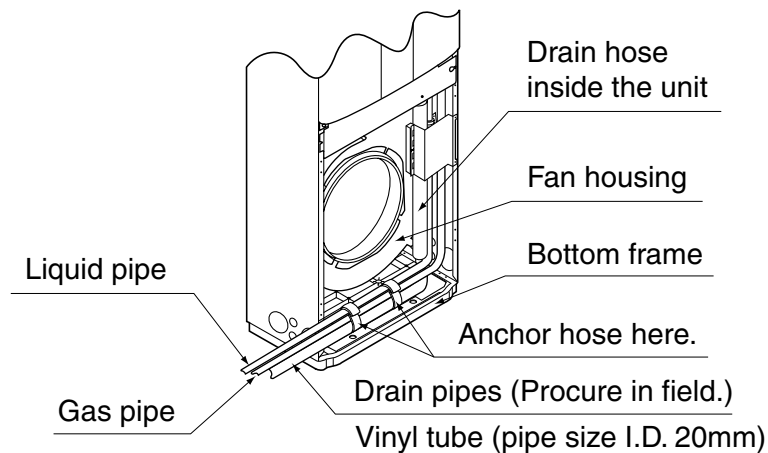


- After rigging pipes and wiring, lock down the refrigerant pipes, drain hose inside the unit, indoor-outdoor unit transmission wiring and grounding line, in the piping guide. (For electrical wiring work, see “ELECTRIC WIRING WORK”.)

6. DRAIN PIPING WORK

1. Rig the drain piping.

Rig the drain line to ensure proper drainage. Also, observe the following to prevent leaks.

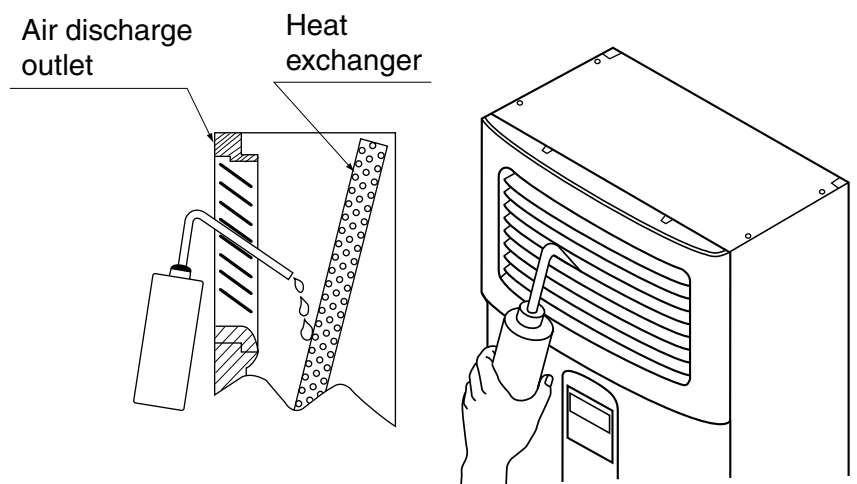


⚠ CAUTION

- Bundle the drain pipe to the refrigerant pipes as shown at right or take other means to anchor it down, so as not to apply pressure to the hose inside the unit. This is necessary to prevent the drain pipe from disconnecting and to ensure proper insulation. Keep the drain pipe sloping at a minimum 1/100 gradient, to prevent air pockets.
- The drain pipe may be clogged if water accumulates in the drain pipe.
- Condensate can form on the pipe and leak from the unit. Therefore, definitely insulate the pipe in at least the below two places.
 - All pipe in the room and inside the unit.
 - At connection between the unit's drain hose and building drain pipe.

2. After rigging the drain hose, check that drainage flows smoothly and that water does not leak from connections.

- Carefully pour approximately 1,000cc of water through the air discharge outlet so that it falls directly onto the heat exchanger at an angle without splashing. (See figure at right.)
 - * If water is poured too fast or if water pressure is too high, the water will pass through the heat exchanger and drip on the fan motor below it.
 - * If water gets on the inner front wall, it will leak onto the floor.



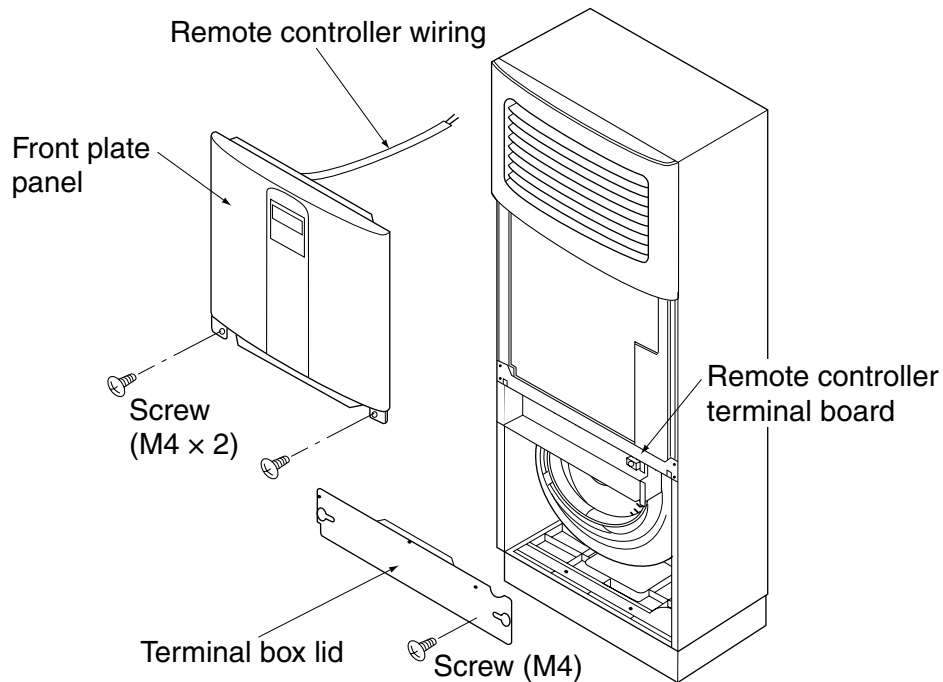
⚠ CAUTION

- In order to prevent the intrusion of small animals, seal the pipe penetration hole with putty or heat insulating material (field supply).
- 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.

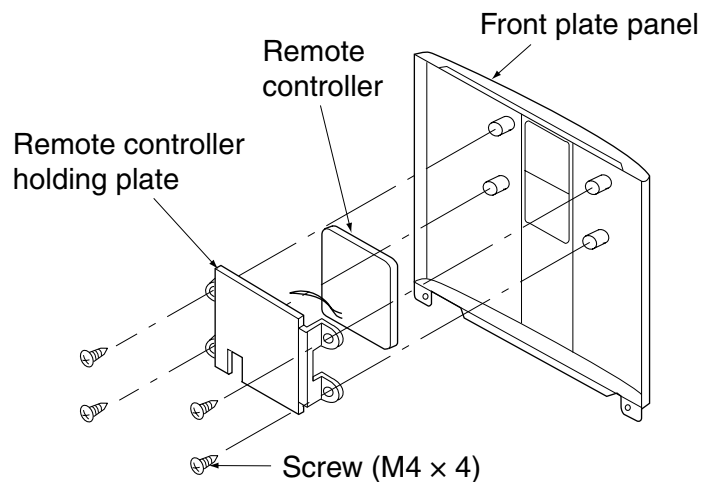
7. SEPARATE INSTALLATION OF THE CONTROL PANEL

- For this unit, remote controller (operation part) attached to the control panel can be installed separately by using the field supplied remote controller cord.
Refer to section of ELECTRIC WIRING WORK (p. 12) for specifications of remote controller cord.

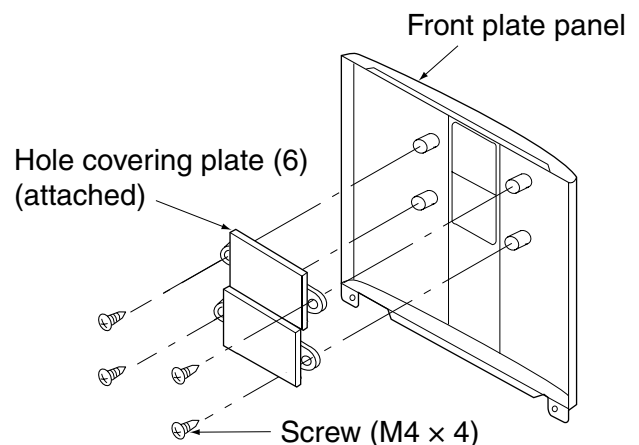
1. Detach the terminal box lid and detach the remote controller cable from the remote controller terminal board.



2. Remove the remote controller holding plate on the back side of the front plate panel.

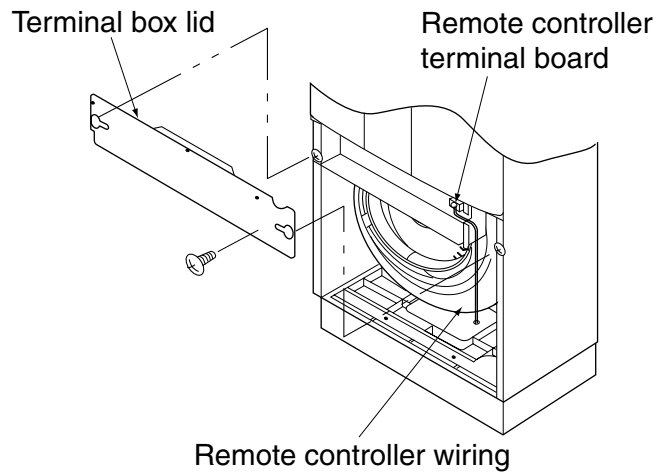


3. Fix the attached hole covering plate on the front plate panel where the remote controller was set.



4. Connect the remote controller wiring (field supplied) to the remote controller terminal board and lead the wiring out of the unit as shown below.

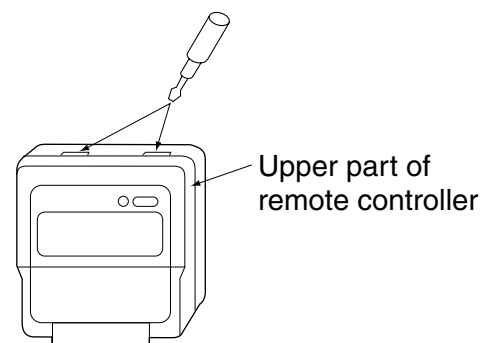
- Lock the remote controller wiring to the piping guide.



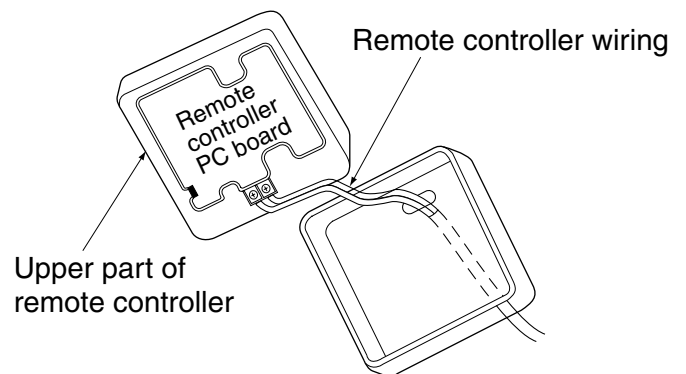
5. Open the remote controller and attach the remote controller wiring (field supplied). (Remote controller wiring has no polarity)

1. Remove the upper part of the remote controller.

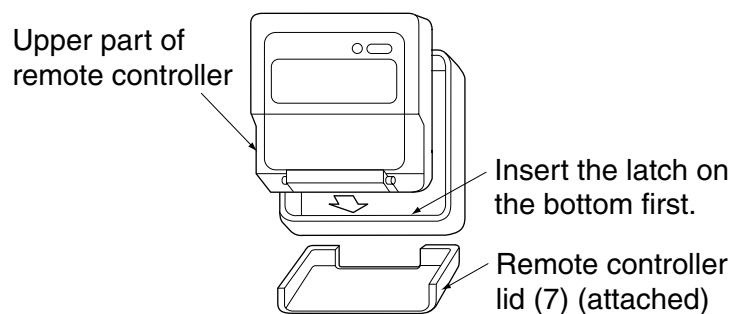
Remove the upper part of the remote controller with \ominus screw drivers, etc.



2. Attach the remote controller wiring.



3. Reassemble the remote controller in the opposite order of 1. and at last, install the attached remote controller lid (7).



6. After the remote controller wiring, reassemble the indoor unit referring to procedures 1. ~ 4.

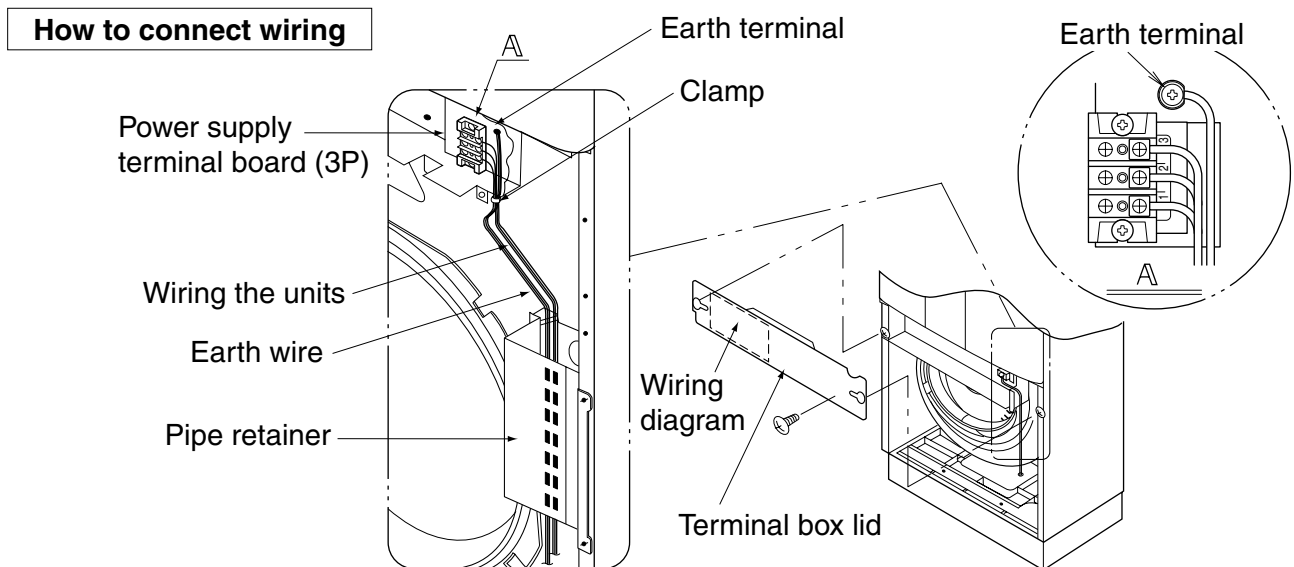
8. ELECTRIC WIRING WORK

- All field supplied parts and materials and electric works must conform to local codes.
- Use copper wire only.
- For electric wiring work, refer also to “WIRING DIAGRAM” attached to the unit body.
- For remote controller wiring details, refer to the installation manual attached to the remote controller.
- 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 breaker.
Failure to install an earth leakage breaker may result in electric shocks.
- 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.
- Be sure to ground the air conditioner.
- Do not connect the ground wire to gas pipes, plumbing pipes, lightning rods, or telephone ground wires.
 - Gas pipes: could explode and cause fires if there was a gas leak.
 - Plumbing pipes: no grounding effect if hard vinyl pipes are used.
 - Telephone ground wires or lightning rods: the ground potential could rise dangerously high if hit by lightning.
- **Specifications for field wire**

	Wire	Size (mm ²)	Length
Wiring the units	H05VV-U4G (NOTE 1)	2.5	—
Remote controller cord (In case of installing the control panel separately)	Vinyl cord with sheath or cable (2 wire) (NOTE 2)	0.75 - 1.25	Max. 500m

NOTE

1. Shows only in case of protected pipes. Use H07RN-F in case of no protection.
2. Insulated thickness : 1mm or more.



< Methods of wiring units and connecting remote controller cords >

- Detach the Terminal box lid as shown in the figure and connect the wires to the unit wiring terminal board (3P) on the right side of the unit matching phase. Then, fix the wire using the clamp.
- Arrange the wires and fix a lid firmly so that the lid does not float during wiring work.
- Lock wires connecting the units and the grounding line to the pipe retainer.

[PRECAUTIONS]

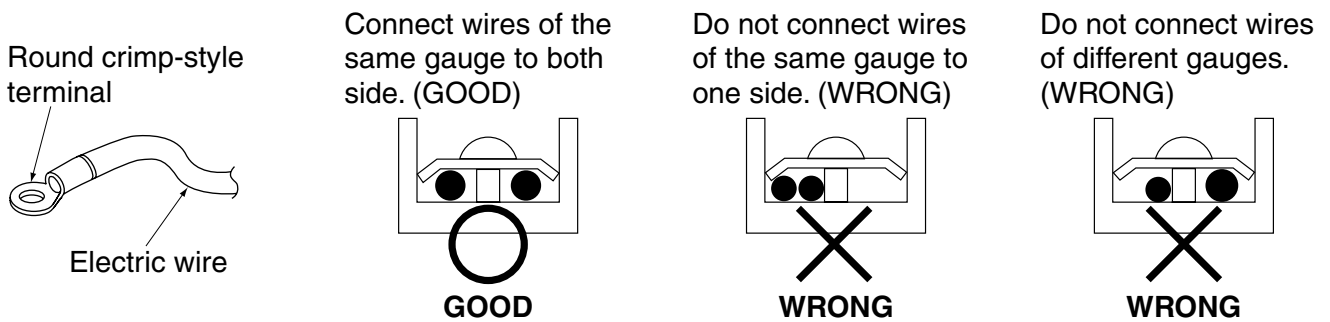
- Do not clamp remote controller cords together with wires connecting the units. Doing so may cause malfunction.
- Remote controller cords and wires connecting the units should be located at least 50mm from other electric wires. Not following this guideline may result in malfunction due to electrical noise.

- In order to prevent the intrusion of small creatures, seal the wiring outlet with putty or heat insulating material (field supply). (If small creatures, such as insects, intrude into the unit, the creatures may cause short-circuiting in the terminal box.)

⚠ CAUTION

- Observe the notes mentioned below when wiring to the power supply terminal board.
 Precautions to be taken for power supply wiring
 (Use a round crimp-style terminal for connection to the power supply terminal board. 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.)
 - When connecting wires of the same gauge, connect them according to the below figure.
 - In wiring, make certain that prescribed wires are used, carry out complete connections, and fix the wires so that outside forces are not applied to the terminals.
 - Do not tighten the terminal screw excessively, or otherwise the screw may be damaged.
 - The tightening torque of each terminal screw is shown in the table on the right-hand side.

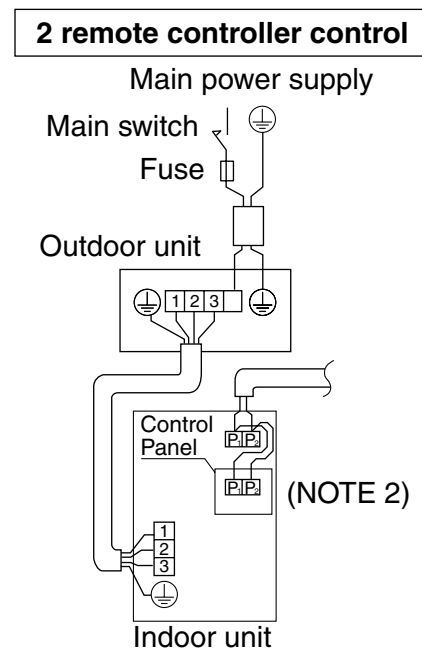
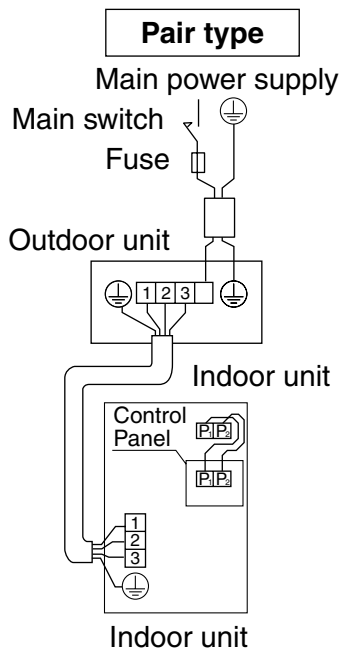
Tightening torque (N·m)	
Terminal block for remote controller wiring	0.79~0.97
Terminal block for wiring between units	1.18~1.44
Earth terminal	1.44~1.94



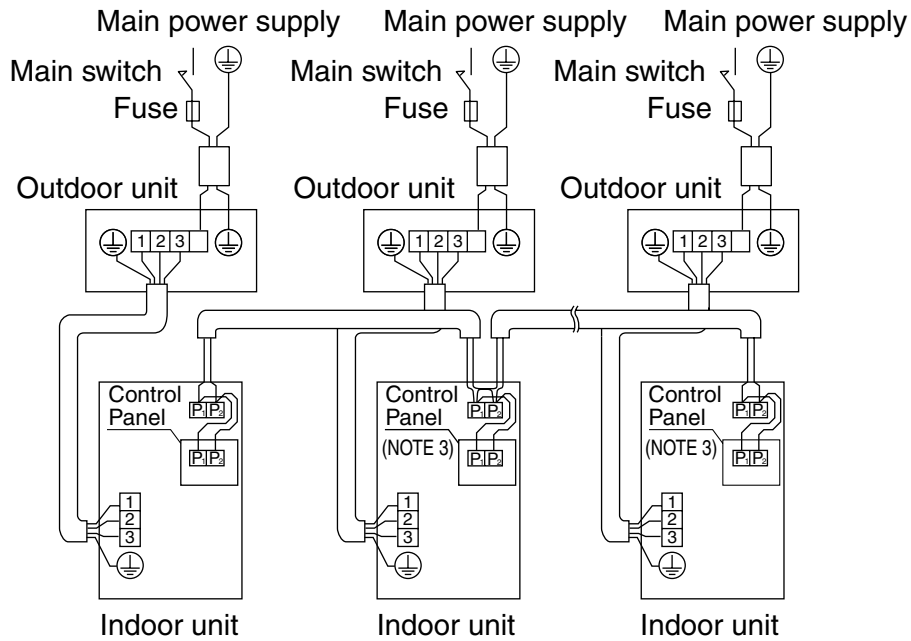
9. WIRING EXAMPLE

(For the wiring of outdoor units, refer to the installation manual attached to the outdoor unit.)
 Confirm the system type.

- Pair type: 1 control panel controls 1 indoor unit (standard system).
- 2 remote controller control: 1 control panel and 1 remote controller control 1 indoor unit.
- Group control: 1 control panel controls up to 16 indoor units (All indoor units operate according to the control panel).



Group control



NOTE

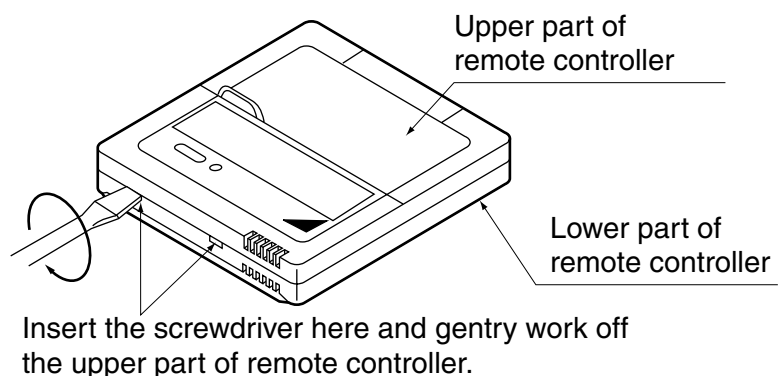
1. All transmission wiring except for the remote controller wires must match the terminal symbol.
2. If the unit is under 2 remote controller control, perform additional wiring of the remote controller to the remote controller terminal board. (Refer to the section entitled SEPARATE INSTALLATION OF THE CONTROL PANEL)
3. If the unit is under group control, detach the remote controller cord connecting the remote controller terminal board and the control panel. (Refer to the section entitled SEPARATE INSTALLATION OF THE CONTROL PANEL)

Control by 2 Remote Controllers (controlling 1 indoor unit with 2 remote controllers)

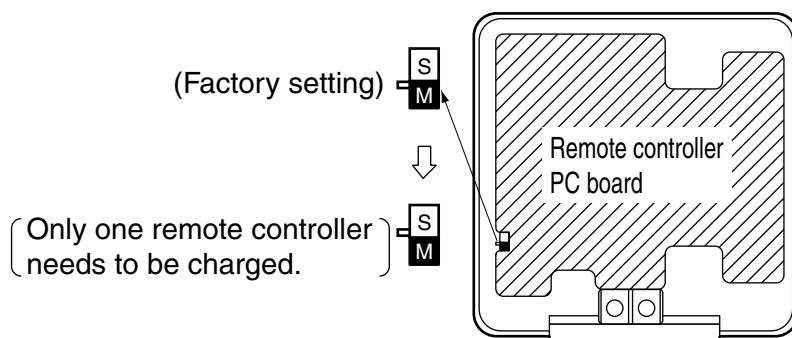
- When using 2 remote controllers, one of either the control panel or the separate remote controller must be set to "MAIN" and the other to "SUB".

〈 MAIN/SUB CHANGEOVER 〉

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.

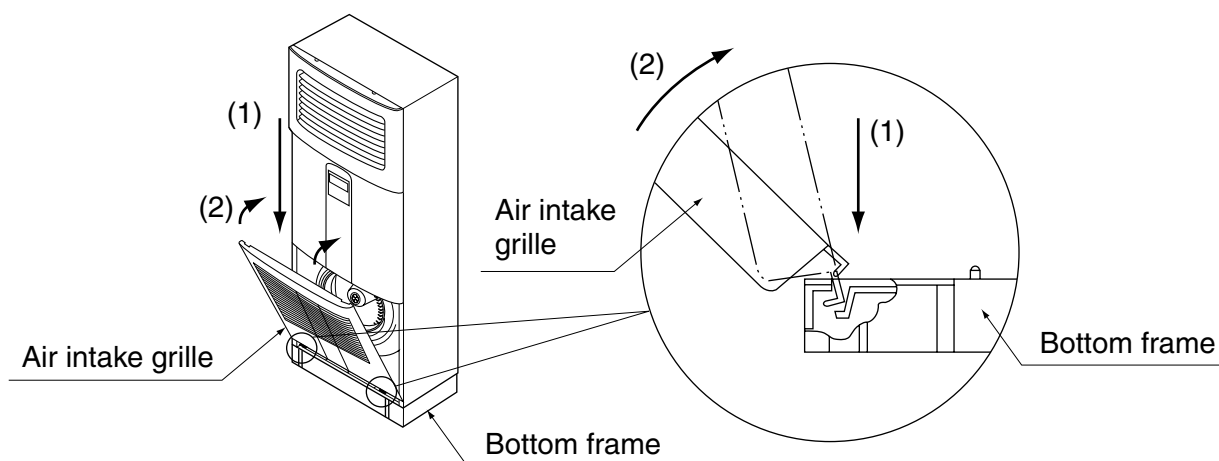


- Turn the MAIN/SUB CHANGEOVER SWITCH on one of the two remote controller PC boards to "S". (Leave the switch to the other remote controller set to "M".)



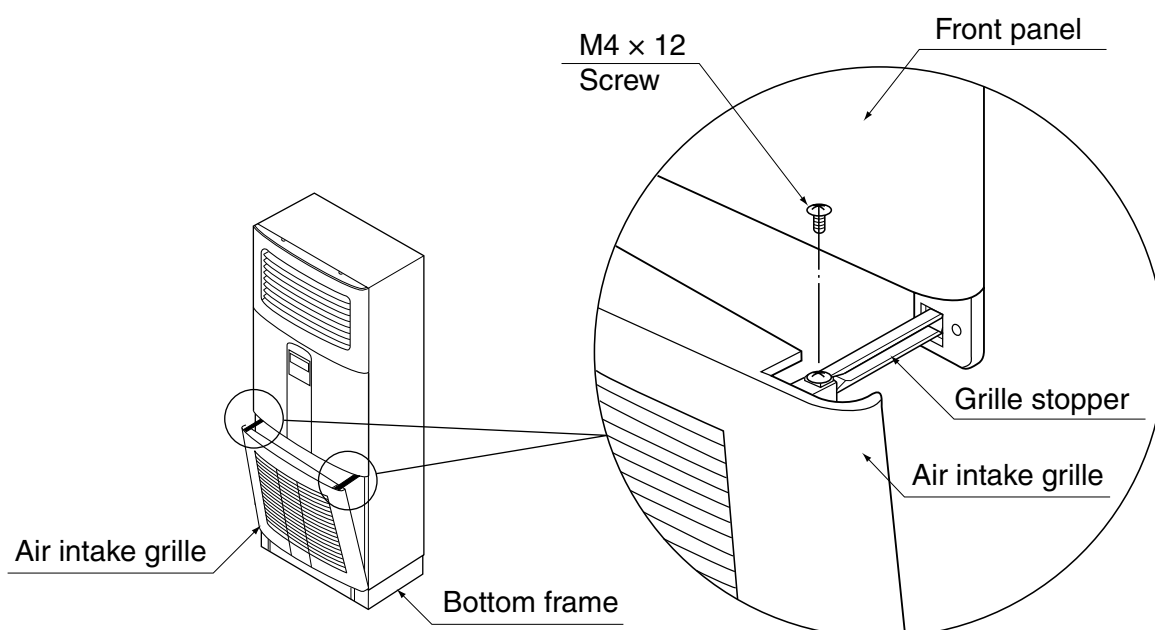
10. INSTALLATION OF AIR INTAKE GRILLE

- Hook the air intake grille on the groove on the unit's bottom frame in the order of (1) → (2). (See below figure.)



- Fit the grille stopper (front panel) into the groove on the air intake grille and lock the grille down in its original place by screw. (See below figure)

* Be careful not to overtighten screws.










11. FIELD SETTING

Field setting

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

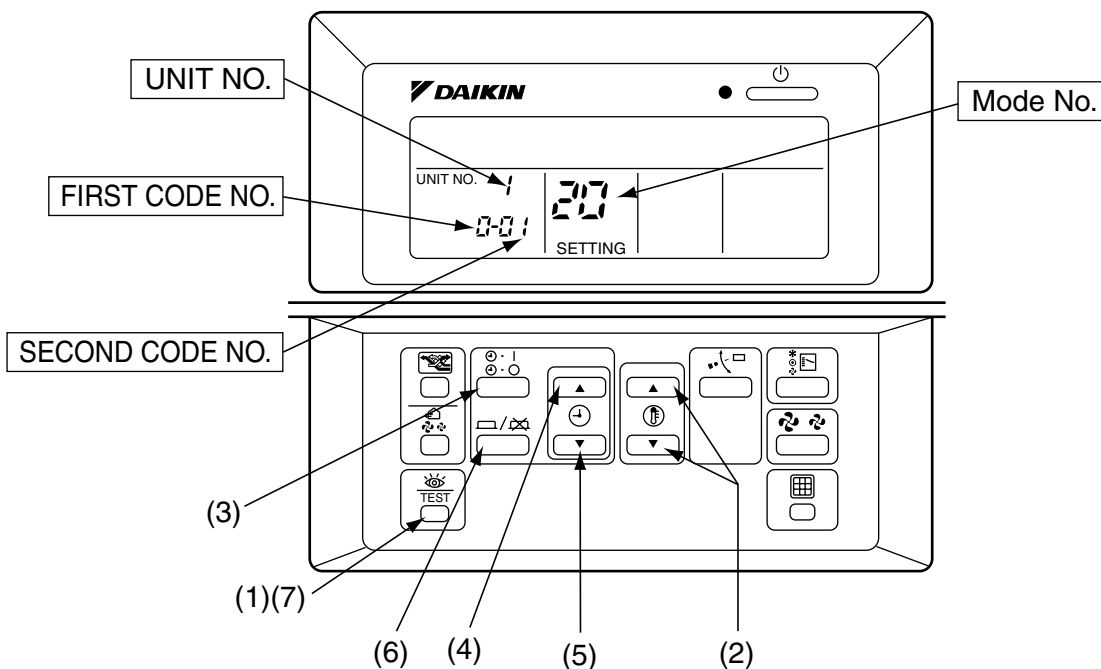
- Setting can be made by changing the “Mode No.”, “FIRST CODE NO.”, and “SECOND CODE NO.”.
- Refer to the following procedure for Field setting.

< Procedure >

- (1) Press the INSPECTION/TEST OPERATION button () for 4 seconds or more in normal mode to change to “FIELD SETTING MODE”.
- (2) Press the TEMPERATURE SETTING button () and choose the desired “Mode No.”.
- (3) Under group control, if setting on each indoor unit is to be performed, press the TIMER MODE START/STOP button () and select the indoor unit number.
(Unnecessary in case of unified setting of group control)
- (4) Press the PROGRAMING TIME upper part of the button () and select the “FIRST CODE NO.”.
- (5) Press the part of the button () and select the “SECOND CODE NO.”.
- (6) Press the TIMER ON/OFF button () once to fix the change of the setting.
- (7) Press the INSPECTION/TEST OPERATION button () to return to the “NORMAL MODE”.

NOTE

- Setting is performed by a group as a seto when individual setting of each indoor unit is required, or when the setting results must be checked, use the mode number is ().



1. Setting air filter sign

- Control panels are equipped with the liquid crystal display of air filter signs to display the time to clean air filters.
- Change the “SECOND CODE NO.” according to Table 2 depending on the amount of dirt or dust in the room.
(“SECOND CODE NO.” is factory set to “01” for filter contamination-light)

Table 2

Setting	Filter cleaning period (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

2. Setting indoor unit number of simultaneous operation system

- When using in simultaneous operation system mode, change the SECOND CODE NO. as shown in Table 3.
(SECOND CODE NO. is factory set to "01" for Pair system.)

Table 3





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

12. TEST OPERATION

Refer to the section of "FOR THE FOLLOWING ITEMS, TAKE SPECIAL CARE DURING CONSTRUCTION AND CHECK AFTER INSTALLATION IS FINISHED" .

- After finishing the construction of refrigerant piping, drain piping, and electric wiring, conduct test operation accordingly to protect the unit.

1. HOW TO TEST OPERATION

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

PRECAUTIONS

- Refer to the diagnoses below if the unit does not operate properly.
- 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 the malfunction diagnoses below.

E5	Compressor motor lock malfunction (outdoor unit)
E7	Outdoor fan motor lock malfunction Outdoor fan instantaneous overcurrent malfunction (outdoor unit)
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 (outdoor unit)
H9	Outdoor air thermistor faulty (outdoor unit)
	The air conditioner comes to a stop due to an error depending on the model or operating conditions.
J2	Current sensor faulty
J3	Discharge pipe thermistor faulty (outdoor unit)
	The air conditioner comes to a stop due to an error depending on the model or operating conditions.
J5	Suction pipe thermistor faulty (outdoor unit)
J6	Heat exchanger thermistor faulty (outdoor unit)
	The air conditioner comes to a stop due to an error depending on the model or operating conditions.
J9	Suction temperature sensor faulty (outdoor unit)
JA	Pressure sensor for discharge pipe faulty (outdoor unit)
JC	Pressure sensor for suction pipe faulty (outdoor unit)
L4	Overheated heat-radiating fin (outdoor unit)
	Inverter cooling defect.
L5	Instantaneous overcurrent (outdoor unit)
	Possible earth fault or short circuit in the compressor motor.
L8	Electric thermal (outdoor unit)
	Possible electrical overload in the compressor or cut line in the compressor motor.
L9	Stall prevention (outdoor unit)
	Compressor possibly locked.
LC	Transmission malfunction between the outdoor control units' inverters (outdoor unit)
P1	Open-phase (outdoor unit)
P3	PC board temperature sensor malfunction (outdoor unit)
P4	Heat-radiating fin temperature sensor malfunction (outdoor unit)
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
	The quantity of refrigerant may be insufficient.
U1	Reverse phase
	Reverse two of the L1,L2 and L3 leads.
U2	Power source voltage malfunction (outdoor unit)
	Inverter phase loss or a failure in the main circuit capacitor may be resulting.
U4 UF	Transmission error (indoor unit – outdoor unit)
	Wrong 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 – remote controller)
	Transmission is improper between the indoor unit and the remote controller.

U8	Malfunction in transmission between main and sub remote controllers. (Malfunction in sub remote controller.)
UA	Miss setting for multi system
	Error in multi-system settings for simultaneous ON/OFF operation.
UC	Central control address overlapping
UJ	Transmission failure in accessory equipment

13. WIRING DIAGRAM

(Refer to Fig. 6)

1	TO OUTDOOR UNIT	2	CONTROL PANEL
3	TERMINAL BOX	4	INDOOR UNIT
5	NOTE) 7		

