

Refrigerant
R407C&R22



Cassette Type (VRF System)

INSTALLATION INSTRUCTION SHEET

(PART NO. 9367700028)

This air conditioner uses R407C and R22.

For authorized service personnel only.

 WARNING!	This mark indicates procedures which, if improperly performed, might lead to the death or serious injury of the user.
 CAUTION!	This mark indicates procedures which, if improperly performed, might possibly result in personal harm to the user, or damage to property.

WARNING

- ① For the air conditioner to operate satisfactorily, install it as outlined in this installation instruction sheet.
- ② Connect the indoor unit and outdoor unit with the air conditioner piping and cords available from our standard parts. This installation instruction sheet describes the correct connections using the installation set available from our standard parts.
- ③ Installation work must be performed in accordance with national wiring standards by authorized personnel only.
- ④ If refrigerant leaks while work is being carried out, ventilate the area. If the refrigerant comes in contact with a flame, it produces a toxic gas.
- ⑤ Do not turn on the power until all installation work is complete.
- ⑥ When installing or moving the air conditioner, use care not to charge it with the wrong refrigerant (such as R407C or R22).

CAUTION

Observe the following precautions when using R407C refrigerant.

- Do not use mineral oil on flared part.
Prevent mineral oil from getting into the system as this would reduce the lifetime of the unit.
 - Never use piping which has been used for previous installations. Only use parts that are delivered with the unit.
- Be careful not to scratch the air conditioner when handling it.
 - After installation, explain correct operation to the customer, using the operating manual.
 - Let the customer keep this installation instruction sheet because it is used when the air conditioner is serviced or moved.





English

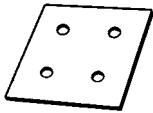

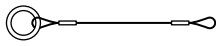

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STANDARD PARTS

The following installation parts are supplied. Use them as required.

Name and Shape	Q'ty	Application
Coupler heat insulation 	2	For indoor side pipe joint insulation
Special nut A (large flange) 	4	For installing indoor unit
Special nut B (small flange) 	4	For installing indoor unit
Connection piping 	1	(This part is enclosed with the 20,000 and 25,000 BTU/n)

Name and Shape	Q'ty	Application
Template 	1	For ceiling hole cutting
Blower cover insulation 	2	For discharged air
Hook wire 	2	For installing intake grille
Binder 	2	For power supply, transmission and remote control cord binding

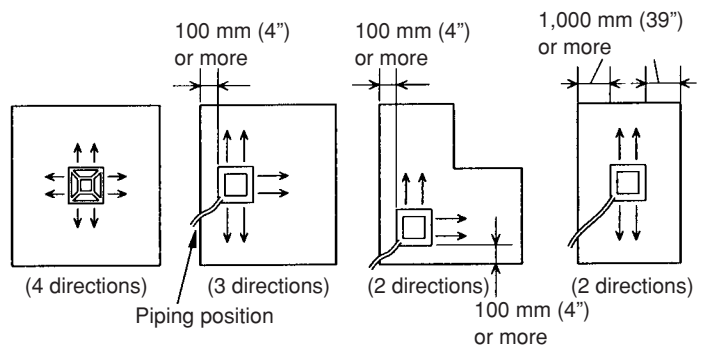
SELECTING THE MOUNTING POSITION

Especially, the installation place is very important for the split type air conditioner because it is very difficult to move from place to place after the first installation.

Decide the mounting position together with the customer as follows:

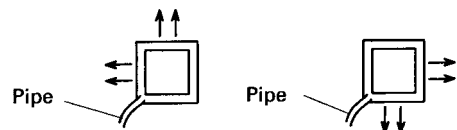
The discharge direction can be selected as shown in Fig. 1.

Fig. 1



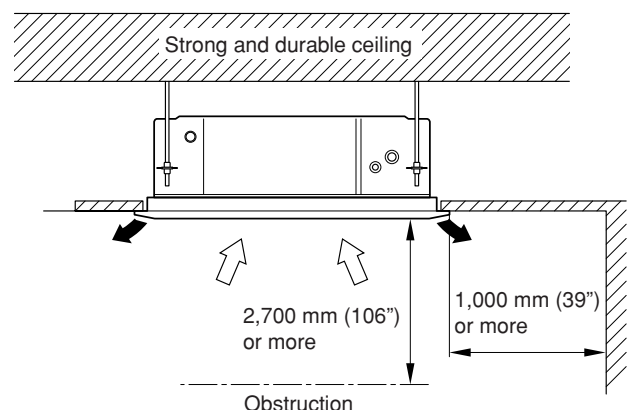
⚠ CAUTION

Do not set the 2-way outlet as shown in the figure to the right. Setting in this manner will cause performance problems.



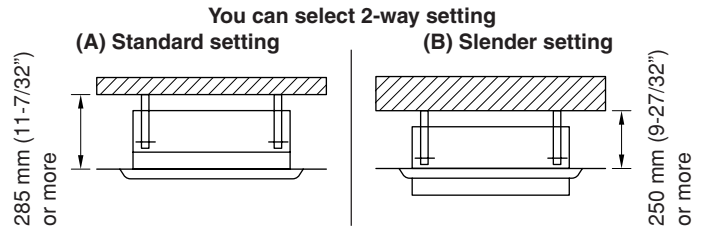
- (1) Install the indoor unit on a place having a sufficient strength so that it withstands against the weight of the indoor unit.
- (2) The inlet and outlet ports should not be obstructed; the air should be able to blow all over the room.
- (3) Leave the space required to service the air conditioner (Fig. 2).
- (4) The ceiling rear height as shown in Fig. 3.
- (5) A place from where the air can be distributed evenly throughout the room by the unit.
- (6) A place from where drainage can be extracted outdoors easily.
- (7) Install the unit where noise and vibrations are not amplified.

Fig. 2



This mechanism enables the cassette body to move 35 mm downward and realizes installation to the space of 250 mm. No special works and option is needed.

Fig. 3



CONNECTION PIPE REQUIREMENT

(1) Connected to outdoor unit

Table 1

unit : mm

Capacity of outdoor unit	Suction Gas Pipe	Discharge Gas Pipe	Liquid Pipe
90	ø28.58 (1.2)	ø19.05 (1.0)	ø12.7 (0.8)

() : thickness

(2) Connected between two immediately adjacent refrigerant branch kits

Table 2

unit : mm

Total capacity of indoor unit	Suction Gas Pipe	Discharge Gas Pipe	Liquid Pipe
Less than 30	ø15.88 (1.0)	ø12.7 (0.8)	ø9.53 (0.8)
31 or more to 60	ø19.05 (1.0)	ø15.88 (1.0)	ø9.53 (0.8)
61 or more	ø28.58 (1.2)	ø19.05 (1.0)	ø12.7 (0.8)

() : thickness

(3) Connected to indoor unit

Table 3

unit : mm

Capacity of indoor unit	Gas Pipe	Liquid Pipe
7, 9	ø9.53 (0.8)	ø6.35 (0.8)
12, 14	ø12.7 (0.8)	ø6.35 (0.8)
18, 20, 24, 25	ø15.88 (1.0)	ø6.35 (0.8)
30	ø15.88 (1.0)	ø9.53 (0.8)
36, 45, 54, 60	ø19.05 (1.0)	ø9.53 (0.8)

() : thickness

* Capacity: The number displayed on the model name for the indoor and outdoor units.

- Use pipe with water-resistant heat insulation.
- Use pipe that can withstand a pressure of 3,040 kPa.
- The discharge gas pipe is only connected on heat recovery models.

ELECTRICAL REQUIREMENT

Table 4

Power supply cord (mm ²)	Maximum	2.5	H07RN-F or equivalent
	Minimum	1.5	
Transmission cord (mm ²)	Maximum	1.25	Shield cord (LONWORKS compatible part)
	Minimum	0.75	
Remote control cord (mm ²)	Maximum	1.25	Sheathed vinyl cord or cable
	Minimum	0.75	
Fuse capacity (A)		20	

INSTALLATION PROCEDURE

Install the air conditioner as follows.

1. INDOOR UNIT INSTALLATION

⚠ WARNING

- ① Install the air conditioner in a location which can withstand a load do at least five times the weight of the main unit and which will not amplify sound or vibration.
If the installation location is not strong enough, the indoor unit may fall and cause injuries.
- ② If the job is done with the panel frame only, there is a risk that the unit will come loose. Please take care.

REMOVING THE INTAKE GRILLE

- (1) Push the intake grille pushbuttons (two places).
- (2) Open the intake grille.
- (3) Remove the grille hinge wire.
- (4) Remove the intake grille.

Fig. 4

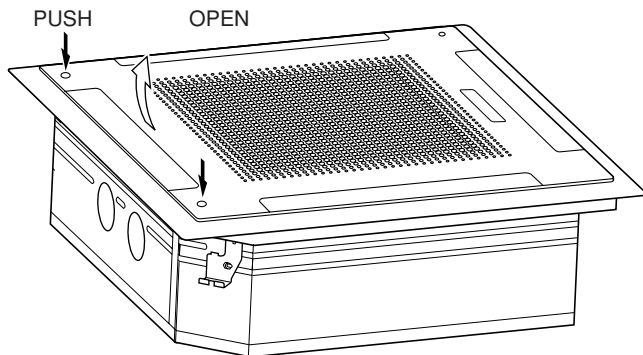
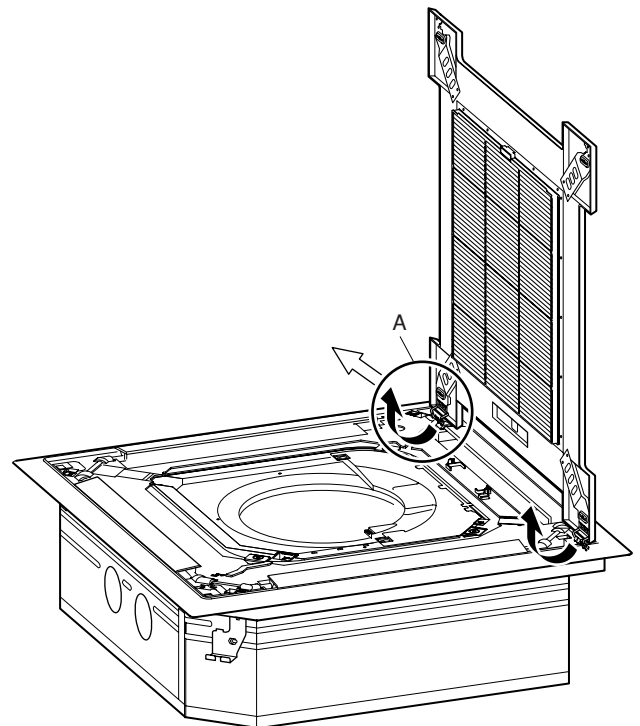


Fig. 5



- Pull up while pressing the B section (Fig. 6).

Fig. 6

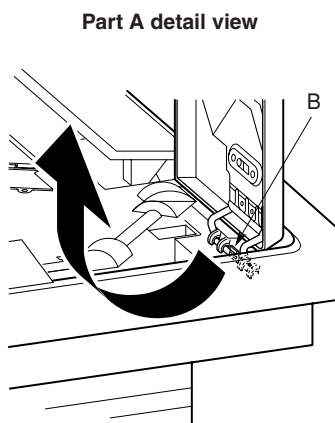
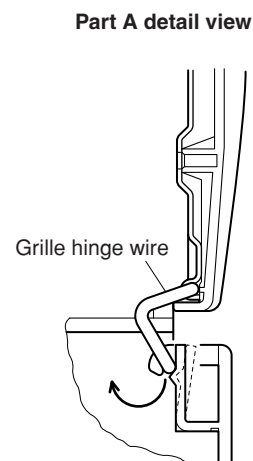


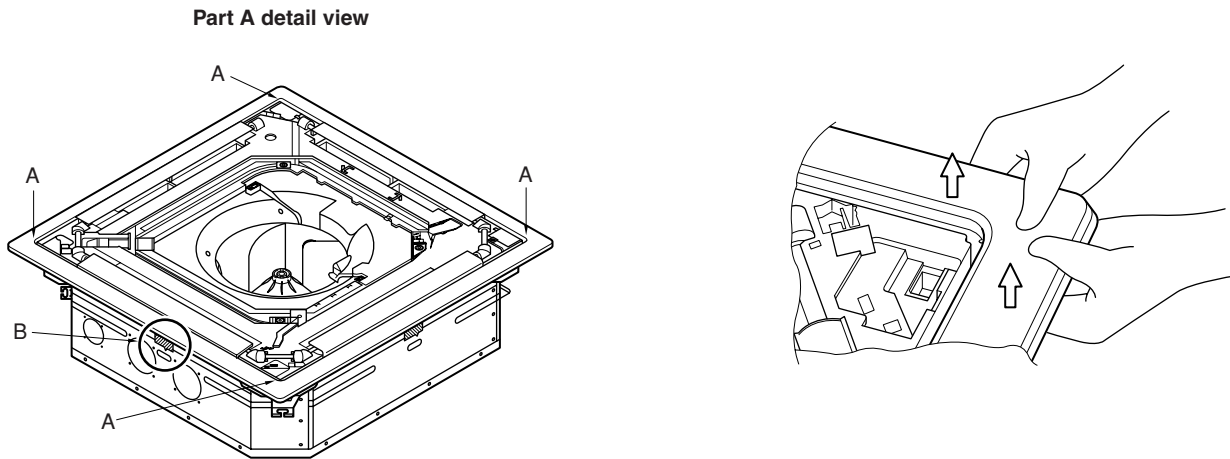
Fig. 7



REMOVING THE PANEL FRAME

- Pull up the corner sections (A) of the panel frame as shown in Fig. 8. (4 locations)

Fig. 8



- Pull up in the direction of the arrow while holding down the C section of Fig. 9. (4 locations)

Fig. 9

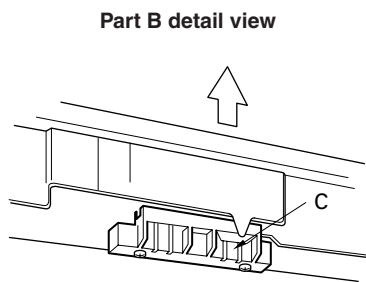
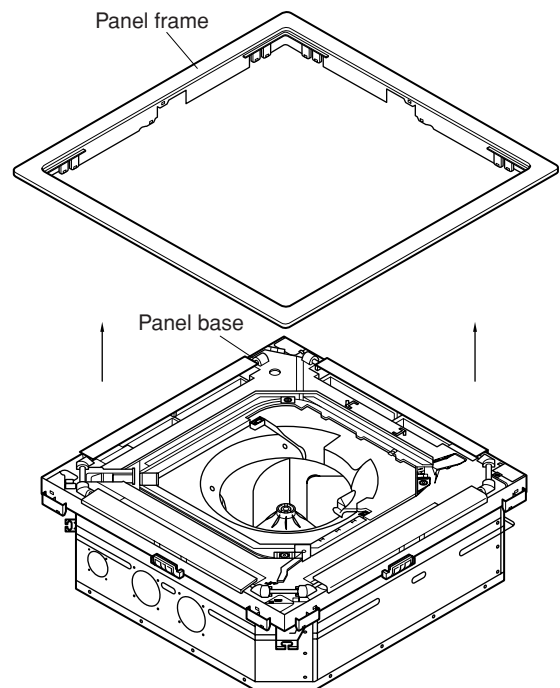


Fig. 10

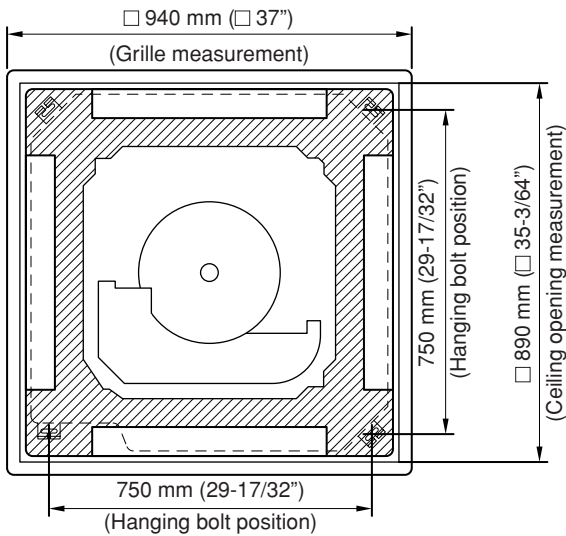


 **CAUTION**

Always remove the panel frame after removing the intake grille.

1. POSITION THE CEILING HOLE AND HANGING BOLTS

Fig. 11



2. HANGING PREPARATIONS

- Firmly fasten the hanging bolts as shown in Fig. 12 or by another method.
- Install the hanging bolts at a place where they would be capable of holding a weight of at least 50 kgf per bolt.

Fig. 12

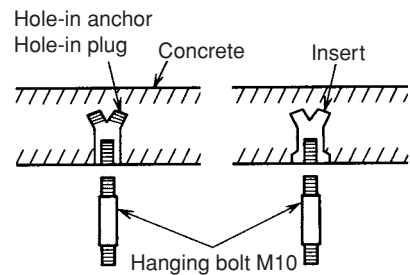
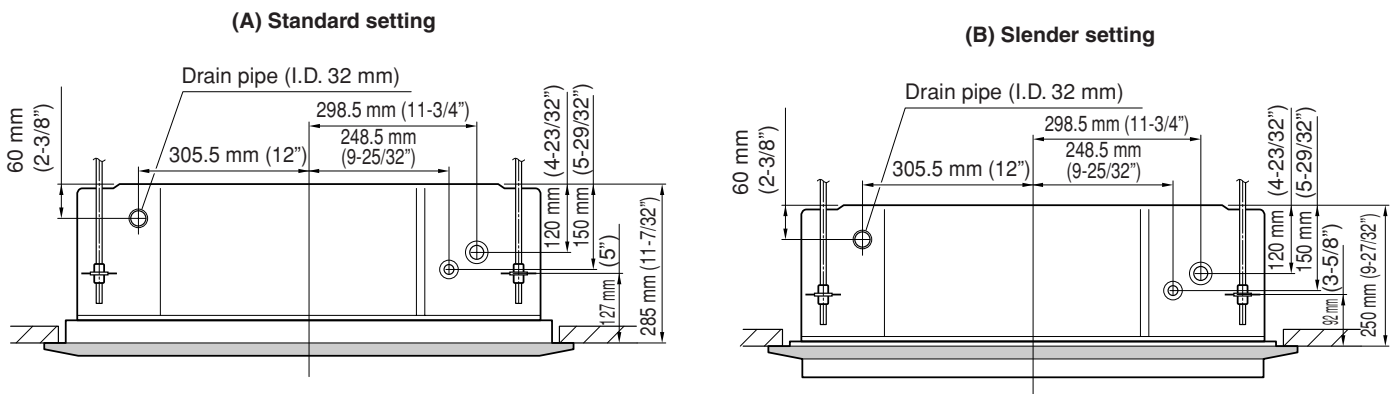


Fig. 13



3. BODY INSTALLATION

[The ceiling rear height is 285 mm (11-7/32") or more.]

[Standard setting]

[The ceiling rear height is 250 mm (9-27/32") or more.]

[Slender setting]

- (1) Install special nut A, then special nut B onto the hanging bolt (Fig. 14).
- (2) Raise the body and mount its hooks onto the hanging bolt between the special nuts (Fig. 14).
- (3) Turn special nut B to adjust the height of the body (Fig. 14).
- (4) Leveling

Using a level, or vinyl hose filled with water, fine adjust so that the body is level.

⚠ WARNING

Perform final tightening by tightening the double nut firmly.

Fig. 14

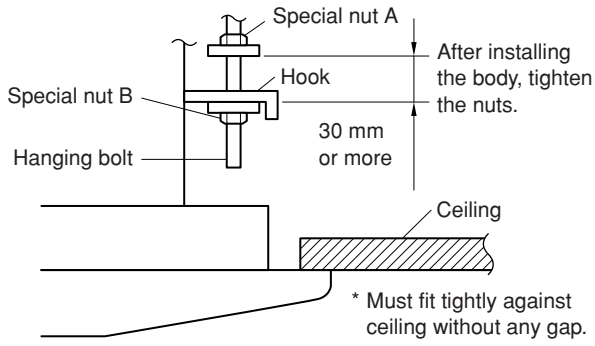
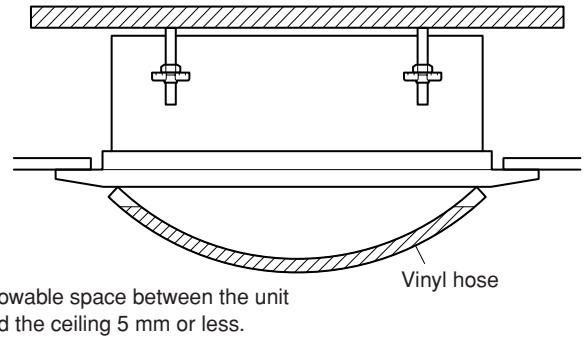
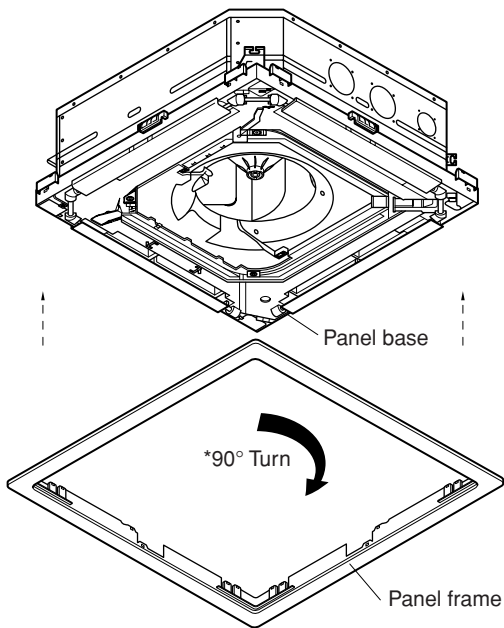


Fig. 15



INSTALLING THE PANEL FRAME

Fig. 16



* With slender setting, turn the panel frame 90° as shown in the diagram above.

Grille setting method has been changed at the marked positions on the panel frame and panel base.

Fig. 17

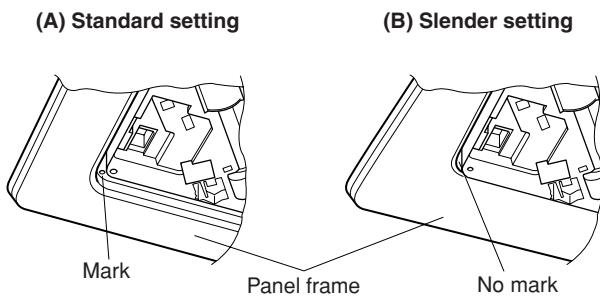
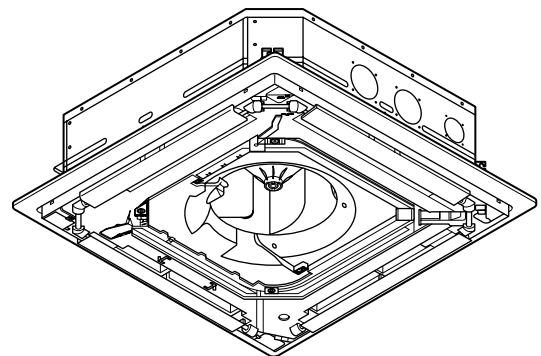


Fig. 18

(Example)



* Appearance of slender setting

2. INSTALLING DRAIN PIPE

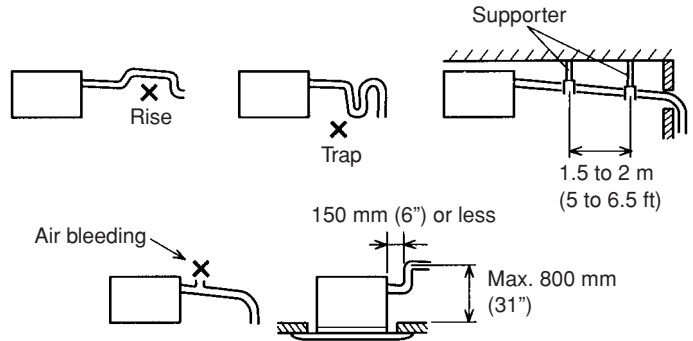
⚠ CAUTION

Install the drain pipe in accordance with the instructions in this installation instruction sheet and keep the area warm enough to prevent condensation. Problems with the piping may lead to water leaks.

NOTE: Install the drain pipe.

- Install the drain pipe with downward gradient (1/50 to 1/100) and so there are no rises or traps in the pipe.
- Use general hard polyvinyl chloride pipe (VP25) [outside diameter 32 mm (1-1/4")] and connect it with adhesive (polyvinyl chloride) so that there is no leakage.
- When the pipe is long, install supporters.
- Do not perform air bleeding.
- Always heat insulate the indoor side of the drain pipe.
- When desiring a high drain pipe height, raise it up to 800 mm (31") or less from the ceiling within a range of 150 mm (6") from the body. A rise dimension over this range will cause leakage.

Fig. 19



3. CONNECTING THE PIPING

⚠ CAUTION

While welding the pipes, be sure to blow dry nitrogen gas through them.

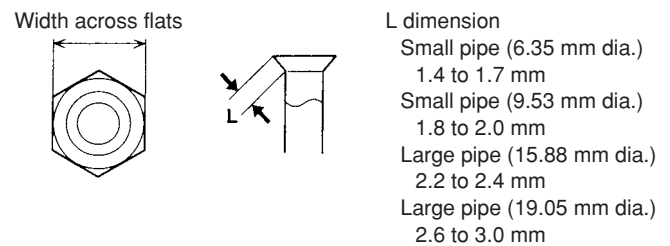
1. FLARE PROCESSING

- (1) Cut the connection pipe with pipe cutters so that the pipe is not deformed.
- (2) Holding the pipe downwards so that cuttings cannot enter the pipe and remove the burrs.
- (3) Remove the flare nut from the indoor unit pipe and outdoor unit and assemble as shown in (Table 5) and insert the flare nut onto the pipe, and flare with a flaring tool.
- (4) Check if the flared part "L" (Fig. 20) is spread uniformly and that there are no cracks.

Table 5

Pipe	Flare nut
Small pipe (6.35 mm dia.)	Small (width across flats 17 mm)
Small pipe (9.53 mm dia.)	Small (width across flats 22 mm)
Large pipe (15.88 mm dia.)	Large (width across flats 24 mm)
Large pipe (19.05 mm dia.)	Large (width across flats 36 mm)

Fig. 20



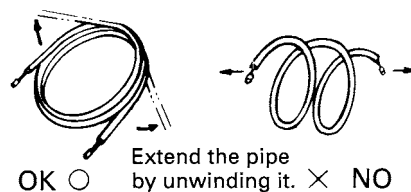
2. BENDING PIPES

The pipes are shaped by your hands. Be careful not to collapse them.

Do not bend the pipes in an angle more than 90°.

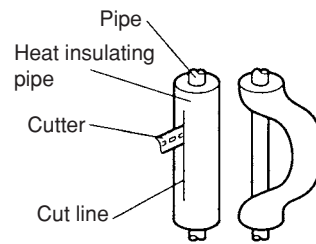
When pipes are repeatedly bent or stretched, the material will harden, making it difficult to bend or stretch them any more. Do not bend or stretch the pipes more than three times.

Fig. 21



When bending the pipe, there is a possibility to collapse. In this case, cut the heat insulating pipe with a sharp cutter as shown in Fig. 22, and bend it after exposing the pipe. After bending the pipe as you want, be sure to put the heat insulating pipe back on the pipe, and secure it with tape.

Fig. 22



3. CONNECTION PIPES

Fig. 23

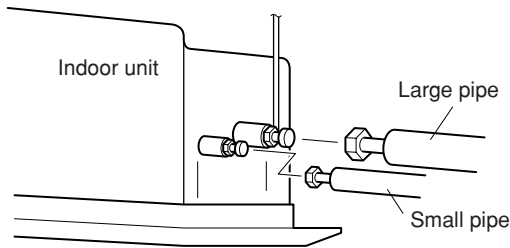
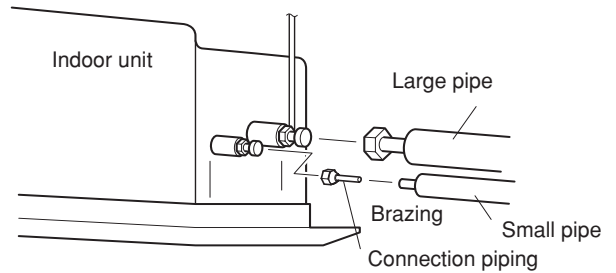


Fig. 24

20,000 and 25,000 BTU/h Model only



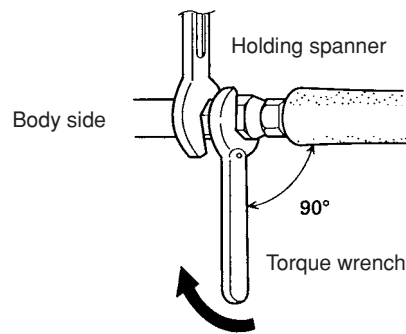
Mount the flare nut and perform the flaring operation on the connection pipe and then connect it to the indoor unit. Braze the connection pipe (small pipe) on the opposite end.

⚠ CAUTION

- ① Be sure to apply the pipe against the port on the indoor unit correctly. If the centering is improper, the flare nut cannot be tightened smoothly. If the flare nut is forced to turn, the threads will be damaged.
- ② Do not remove the flare nut from the indoor unit pipe until immediately before connecting the connection pipe.

When the flare nut is tightened properly by your hand, hold the body side coupling with a separate spanner, then tighten with a torque wrench (Fig. 25).

Fig. 25



⚠ CAUTION

Hold the torque wrench at its grip, keeping it in the right angle with the pipe as shown in Fig. 25, in order to tighten the flare nut correctly.

Table 6: Flare nut tightening torque

Pipe	Tightening torque
Small pipe (6.35 mm dia.)	150 to 200 kgf · cm (14.7 to 19.6 N · m)
Small pipe (9.53 mm dia.)	310 to 350 kgf · cm (30.4 to 34.3 N · m)
Large pipe (15.88 mm dia.)	750 to 800 kgf · cm (73.5 to 78.4 N · m)
Large pipe (19.05 mm dia.)	800 to 1,000 kgf · cm (78.4 to 98 N · m)

⚠ CAUTION

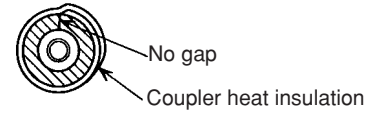
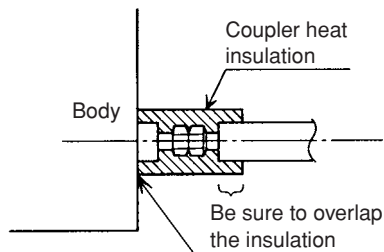
Be sure to connect the large pipe after connecting the small pipe completely.

4. INSTALLING THE COUPLER HEAT INSULATION

After checking for gas leaks, insulate by wrapping insulation around the two parts (large and small) of the indoor unit coupling, using the coupler heat insulation.

After installing the coupler heat insulation, wrap both ends with vinyl tape so that there is no gap.

Fig. 26



CAUTION

Must fit tightly against body without any gap.

5. ELECTRICAL WIRING

HOW TO CONNECT WIRING TO THE TERMINALS

1. IF ONE WIRE IS CONNECTED TO ONE TERMINAL BLOCK

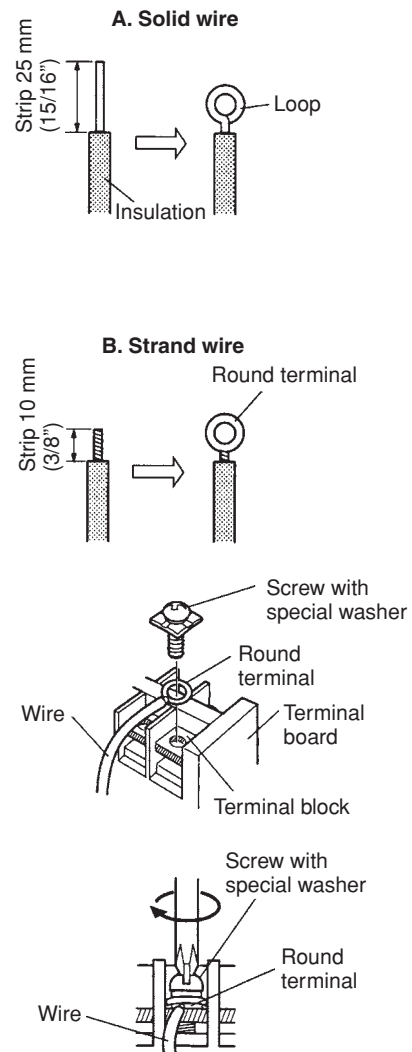
A. For solid core wiring (or F-cable)

- (1) Cut the wire end with a wire cutter or wire-cutting pliers, then strip the insulation to about 25 mm (15/16") to expose the solid wire.
- (2) Using a screwdriver, remove the terminal screw(s) on the terminal board.
- (3) Using pliers, bend the solid wire to form a loop suitable for the terminal screw.
- (4) Shape the loop wire properly, place it on the terminal board and tighten securely with the terminal screw using a screwdriver.

B. For strand wiring

- (1) Cut the wire end with a wire cutter or wire-cutting pliers, then strip the insulation to about 10 mm (3/8") to expose the strand wiring.
- (2) Using a screwdriver, remove the terminal screw(s) on the terminal board.
- (3) Using a round terminal fastener or pliers, securely clamp a round terminal to each stripped wire end.
- (4) Position the round terminal wire, and replace and tighten the terminal screw using a screwdriver.

Fig. 27

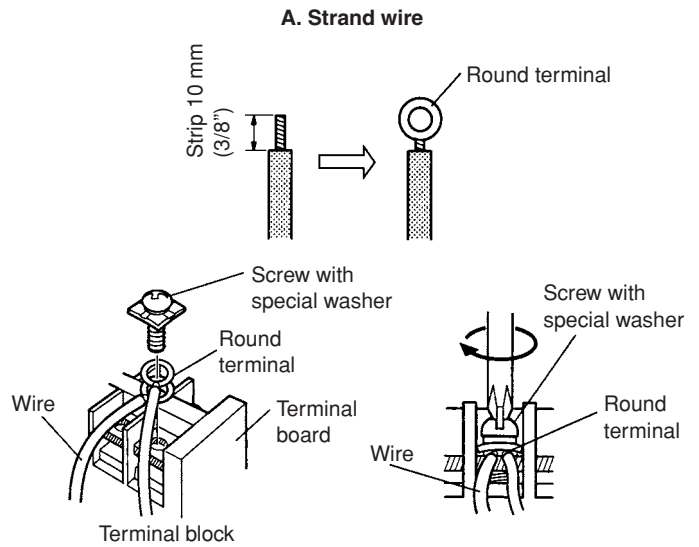


2. IF TWO WIRES ARE CONNECTED TO ONE TERMINAL BLOCK

A. As a rule, round terminal should be used to connect to the terminal block.

- (1) Cut the wire end with a wire cutter or wire-cutting pliers, then strip the insulation to about 10 mm (3/8") to expose the strand wiring.
- (2) Using a screwdriver, remove the terminal screw(s) on the terminal board.
- (3) Using a round terminal fastener or pliers, securely clamp a round terminal to each stripped wire end.
- (4) Position the round terminal wire, and replace and tighten the terminal screw using a screwdriver.

Fig. 28

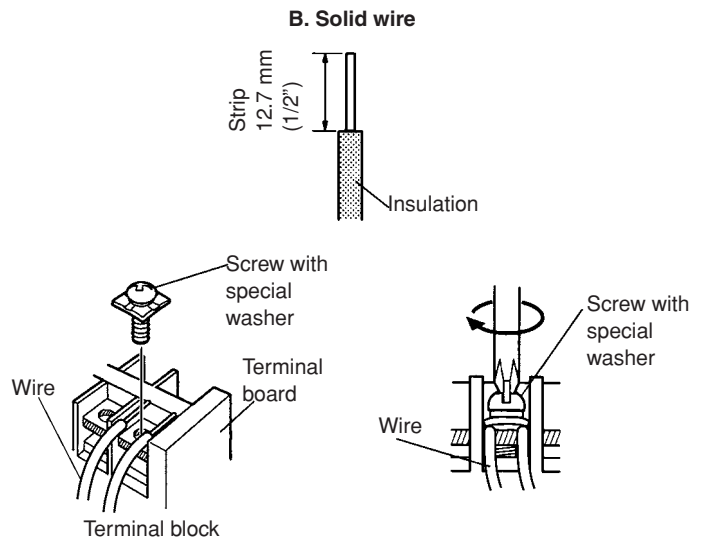


B. If round terminal cannot be used, the following items should be followed.

For solid core wiring (or F-cable)

- (1) Cut the wire end with a wire cutter or wire-cutting pliers, then strip the insulation to about 12.7 mm (1/2") to expose the solid wire.
- (2) Using a screwdriver, remove the terminal screw(s) on the terminal board.
- (3) Wires with the same diameter should be connected on both sides as shown in Fig. 29. Since connecting wires with different diameters causes the wires to heat up due to loose connections, this method should not be used.

Fig. 29

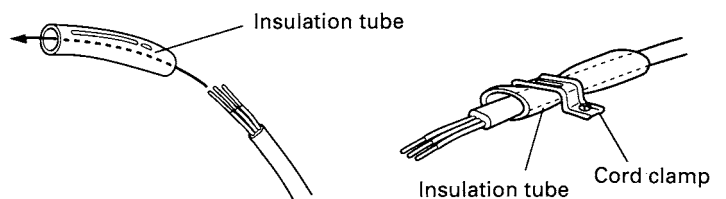


HOW TO FIX THE CONNECTION CORD

After passing the connection cord through the insulation tube, fasten it with the cord clamp.

Use VW-1, 0.5 to 1.0 mm thick, PVC tube as the insulation tube.

Fig. 30

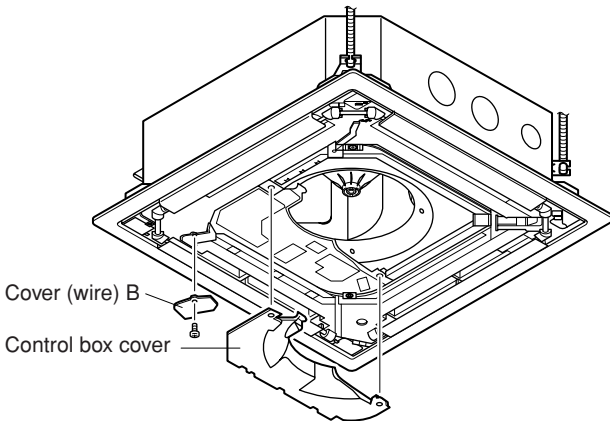


⚠ WARNING

- ① Before starting work, check that power is not being supplied to the indoor unit.
- ② Erroneous wiring may cause burning of the electric parts.
- ③ Connect the connection cord firmly to the terminal board. Imperfect installation may cause a fire.
- ④ Always fasten the outside covering of the connection cord with the cord clamp. (If the insulator is chafed, electric leakage may occur.)
- ⑤ Always connect the ground wire.

Remove the control box cover and cover (wire) B and install the connection cord.

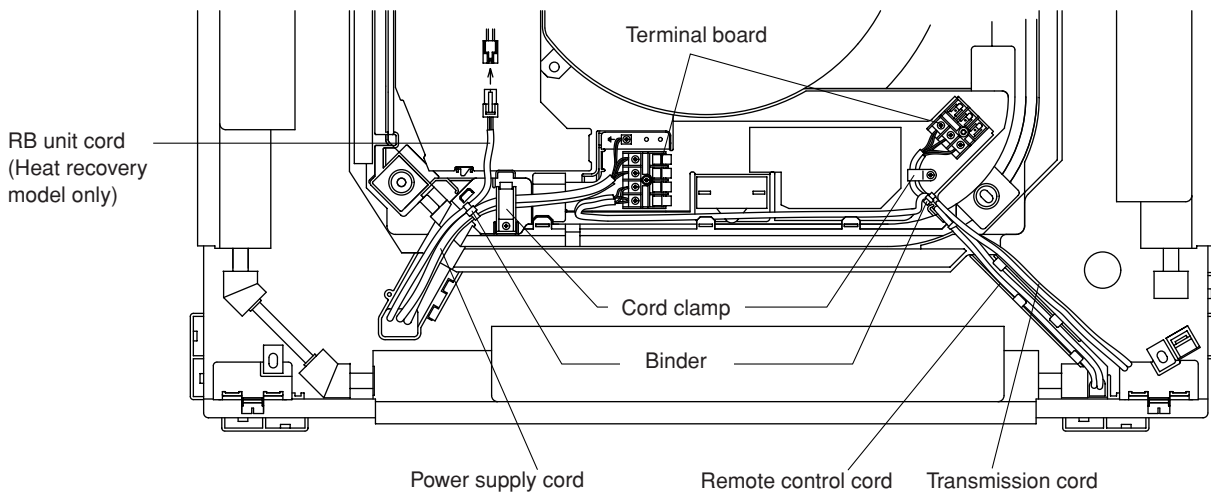
Fig. 31



CONNECTION CORD

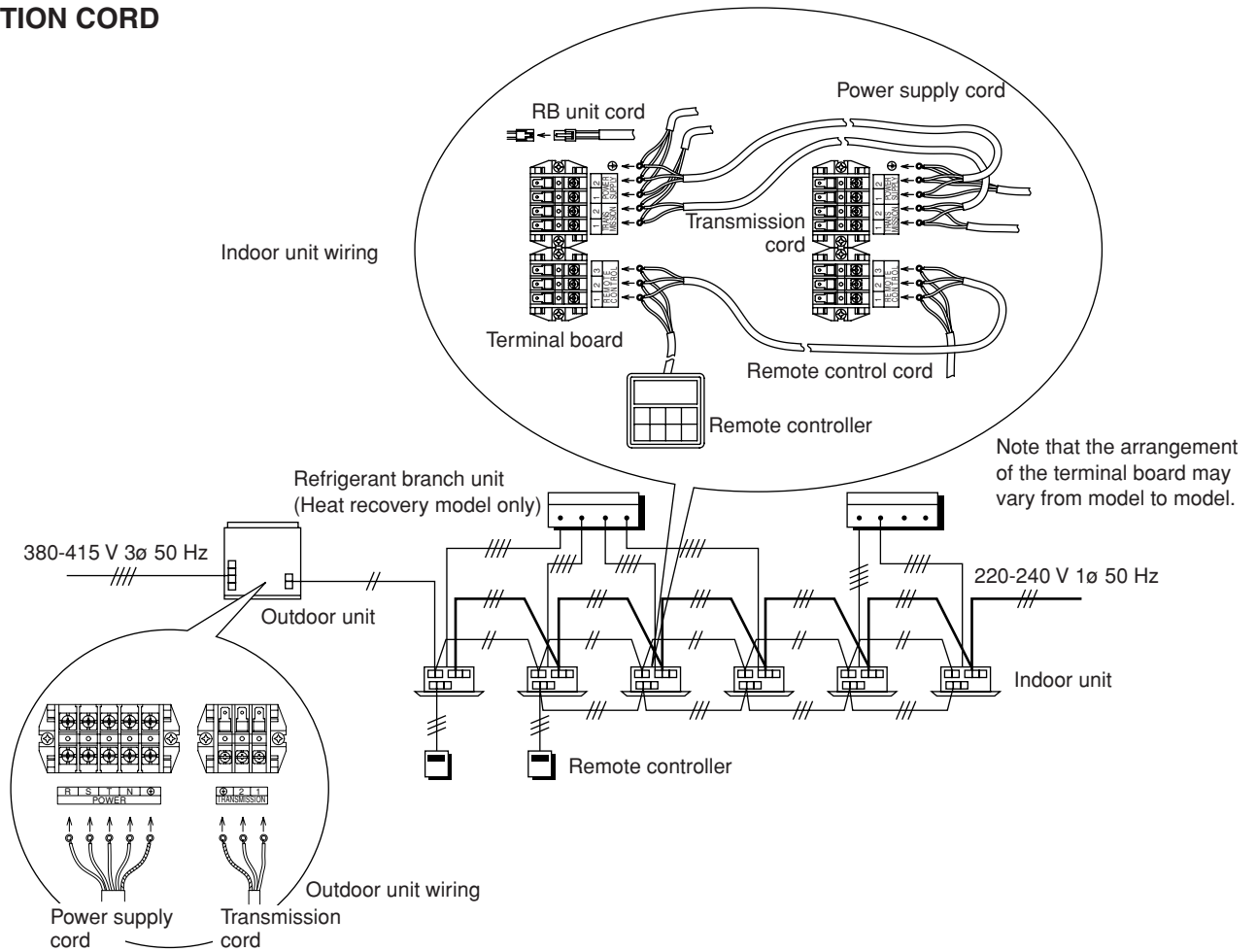
A. Simultaneous operation for buildings

Fig. 32



CONNECTION CORD

Fig. 33
(Example)



⚠ CAUTION

- ① Use care to wire properly. (Miss-wiring will result in damage.)
- ② Never bundle the power supply cord, transmission cord and remote controller cord together. Bundling these cords together will cause misoperation.
- ③ The total length of the transmission cord should not exceed 500 meters. Note that the total length of the transmission cord can be extended to 2,000 meters if the optional signal amplifier is used.
- ④ The power source capacity must be the sum of the air conditioner current and the current of other electrical appliances. When the current contracted capacity is insufficient, change the contracted capacity.
- ⑤ When the voltage is low and the air conditioner is difficult to start, contact the power company the voltage raised.

⚠ WARNING

- ① [1 phase TYPE]
The rated voltage of this product is 220-240 V A.C. 50 Hz.
Before turning on verify that the voltage is within the 198 V to 264 V range.
[3 phase TYPE]
The rated voltage of this product is 380-415 V 3ø 50 Hz.
Before turning on verify that the voltage is within the 342 V to 457 V range.
- ② Always use a special branch circuit and install a special receptacle to supply power to the air conditioner.
- ③ Use a circuit breaker and receptacle matched to the capacity of the air conditioner.
- ④ Perform wiring work in accordance with standards so that the air conditioner can be operated safely and positively.
- ⑤ Install a leakage circuit breaker in accordance with the related laws and regulations and electric company standards.

6. CIRCUIT BOARD SETTING

INDOOR UNIT SETTINGS

(1) Indoor unit addresses

Rotary switch (SW5) - - - Factory setting "0"

When connecting multiple indoor units to one refrigerant system, set the address at SW5 in sequence from 0.

(2) Refrigerant circuit address

Rotary switch (SW7) - - - Factory setting "0"

Rotary switch (SW8) - - - Factory setting "0"

In the case of multiple refrigerant systems, set SW7 and SW8 as shown in the Table 7 for each refrigerant system. Set to the same refrigerant circuit address as the outdoor unit.

Example: When SW8 is set to "1" and SW7 is set to "14", the refrigerant circuit address will be "30".

Table 7

Refrigerant circuit address	Rotary Switch Setting		Refrigerant circuit address	Rotary Switch Setting		Refrigerant circuit address	Rotary Switch Setting		Refrigerant circuit address	Rotary Switch Setting		Refrigerant circuit address	Rotary Switch Setting	
	INDOOR UNIT			INDOOR UNIT			INDOOR UNIT			INDOOR UNIT				
	SW8	SW7		SW8	SW7		SW8	SW7		SW8	SW7		SW8	SW7
0	0	0	20	1	4	40	2	8	60	3	12	80	5	0
1	0	1	21	1	5	41	2	9	61	3	13	81	5	1
2	0	2	22	1	6	42	2	10	62	3	14	82	5	2
3	0	3	23	1	7	43	2	11	63	3	15	83	5	3
4	0	4	24	1	8	44	2	12	64	4	0	84	5	4
5	0	5	25	1	9	45	2	13	65	4	1	85	5	5
6	0	6	26	1	10	46	2	14	66	4	2	86	5	6
7	0	7	27	1	11	47	2	15	67	4	3	87	5	7
8	0	8	28	1	12	48	3	0	68	4	4	88	5	8
9	0	9	29	1	13	49	3	1	69	4	5	89	5	9
10	0	10	30	1	14	50	3	2	70	4	6	90	5	10
11	0	11	31	1	15	51	3	3	71	4	7	91	5	11
12	0	12	32	2	0	52	3	4	72	4	8	92	5	12
13	0	13	33	2	1	53	3	5	73	4	9	93	5	13
14	0	14	34	2	2	54	3	6	74	4	10	94	5	14
15	0	15	35	2	3	55	3	7	75	4	11	95	5	15
16	1	0	36	2	4	56	3	8	76	4	12	96	6	0
17	1	1	37	2	5	57	3	9	77	4	13	97	6	1
18	1	2	38	2	6	58	3	10	78	4	14	98	6	2
19	1	3	39	2	7	59	3	11	79	4	15	99	6	3

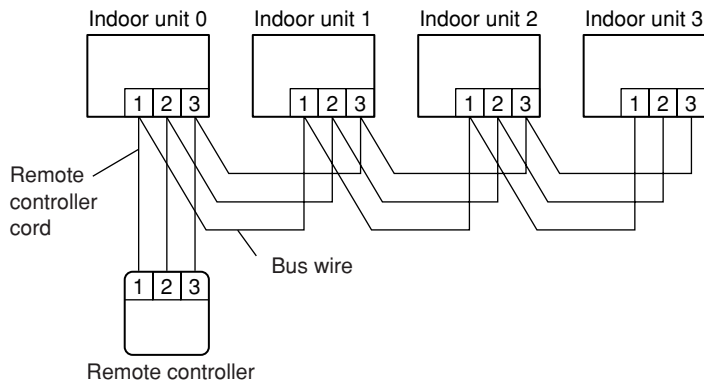
(3) Remote controller address

Rotary switch (SW9) - - - Factory setting "0"

When connecting multiple indoor units to one standard wired remote controller, set the address at SW9 in sequence from 0.

Fig. 34

Example If 4 indoor units are connected.



- (4) Model select switch
SW3 and SW4, mounted on the circuit board, should be checked.

Table 8

Capacity	54	45	36	30	25	20
SW3-1	OFF	ON	OFF	OFF	OFF	ON
SW3-2	OFF	OFF	ON	OFF	ON	ON
SW3-3	OFF	OFF	OFF	ON	ON	ON
SW4-1	OFF	ON	OFF	ON	OFF	ON
SW4-2	ON	OFF	OFF	ON	ON	OFF
SW4-3	OFF	OFF	OFF	ON	ON	ON
SW4-4	ON	ON	ON	OFF	OFF	OFF

- (5) Switching to high-ceiling mode
Set the DIP switch (SW 1) for the ceiling height as shown in the table 9.

Table 9

	Normal	High ceiling 1	High ceiling 2	Low ceiling
Ceiling height (m)	2.5 ~ 3.0	3.0 ~ 3.5	More than 3.5	Less than 2.5
SW1-1	OFF	ON	OFF	ON
SW1-2	OFF	OFF	ON	ON

⚠ CAUTION

- ① If the setting for a low ceiling is selected, the capacity of the air conditioner decreases slightly.
- ② Do not set any switches other than those specified in this sheet. The air conditioner may not operate correctly if any switches other than those specified are changed.

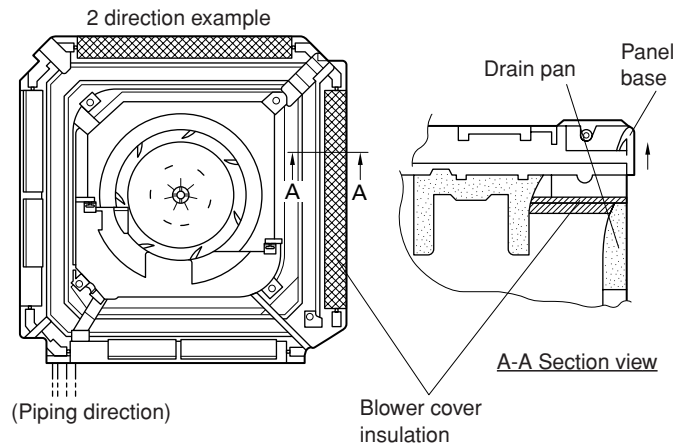
7. GRILLE INSTALLATION

BLOWER COVER INSULATION

Install the blower cover insulation only when the outlet direction is not specified.

Two blower cover insulations are packed with the indoor unit. Install the blower cover insulation at the diffuser position shown in Fig. 35. At this time, use the piping position as the criteria.

Fig. 35



INSTALLING THE INTAKE GRILLE

(1) Mount the grille hinge wire to the hook shaft as shown in Fig. 36.

- Latch the grille hinge wire to the hook shaft, and fasten.

Fig. 36

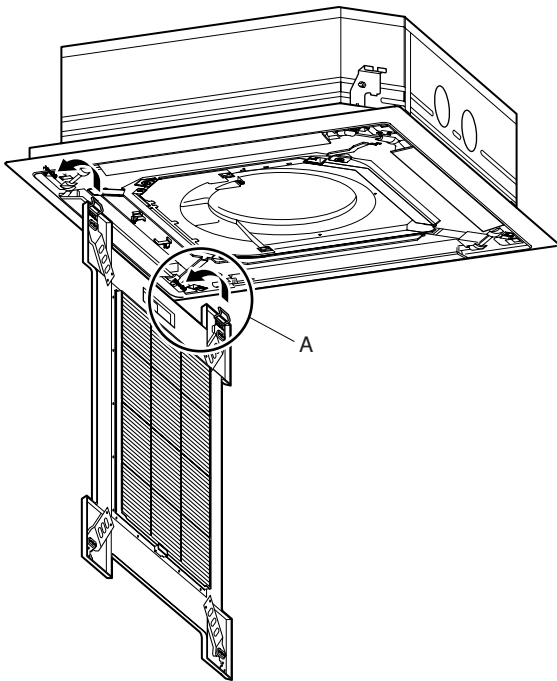


Fig. 37

Part A detail view

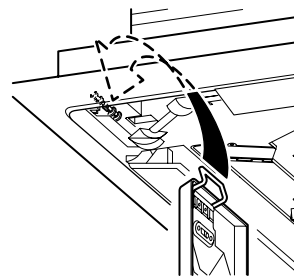
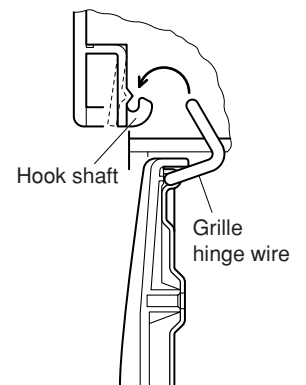


Fig. 38

Part A section view



(2) Install the hook wire.

- Pass the hook wire through the panel base from the rear side as shown in Fig. 39, and fasten to the reinforced metal fitting of the intake grille using a screw.

Fig. 39

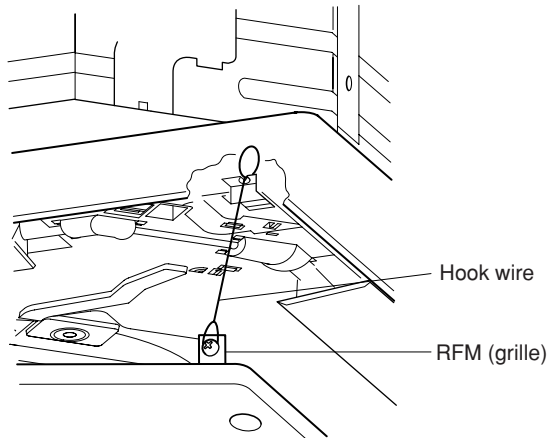
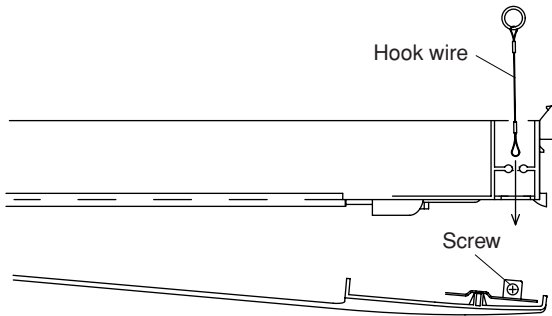


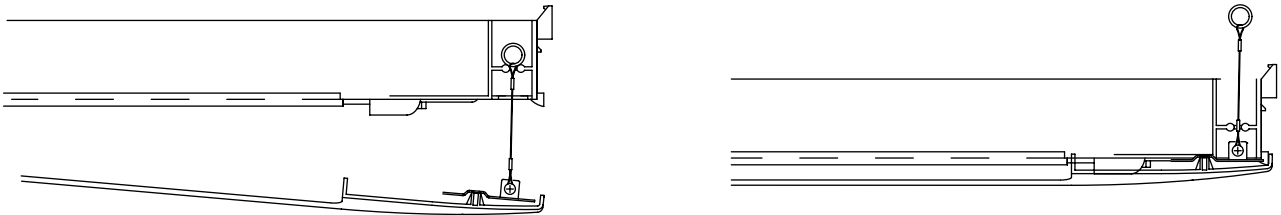
Fig. 40

Section view



(3) Loosen the screw, put the loop of the hook wire over it, and tighten the screw again.

Fig. 41



⚠ CAUTION

Install the intake grille hook wire to the grille assembly. If it falls, it may cause injuries.

(4) Bring up the intake grille by pushing it up at an angle as shown in Figs. 42, 43, and fasten.

Fig. 42

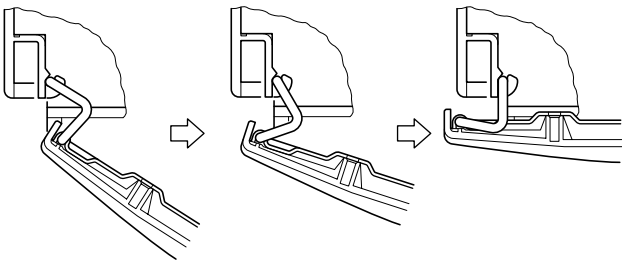
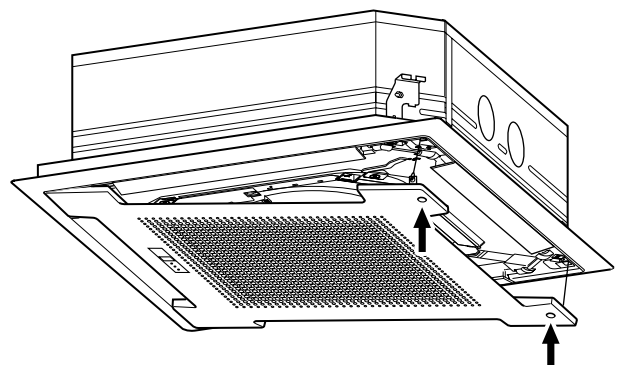


Fig. 43



8. TEST OPERATION

Supply power to the crankcase heater for 12 hours prior to the start of operation in the winter.
The following is the procedure for the test operation.

1. TEST OPERATION USING CIRCUIT BOARD (OUTDOOR UNIT)

Refer to the Installation Instruction Sheet for the outdoor unit if the circuit board for the outdoor unit is to be used for the test operation.

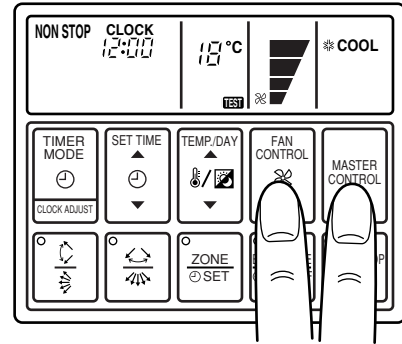
2. TEST OPERATION USING REMOTE CONTROLLER

(1) Standard wired remote controller

- For test running, when the remote controller FAN CONTROL button and MASTER CONTROL button are pressed simultaneously for more than three seconds when the air conditioner is not running, the air conditioner starts and TEST is displayed on the remote controller display.

However, the SET TEMP./DAY setting button does not function, but all other buttons, displays, and protection functions operate (Fig. 44).

Fig. 44



- When EE : EE blinks at the current time display, there is an error inside the air conditioner. If the SET TIME button (↙) and SET TEMP./DAY button (↘) are pressed simultaneously for more than three seconds, the self diagnosis check will start and the error contents will be displayed at the current time display. In addition, the remote controller address will be displayed below. When the operation lamp lights, press the START/STOP button and after operation lamp goes off, perform the same operation (Fig. 45).

Fig. 45

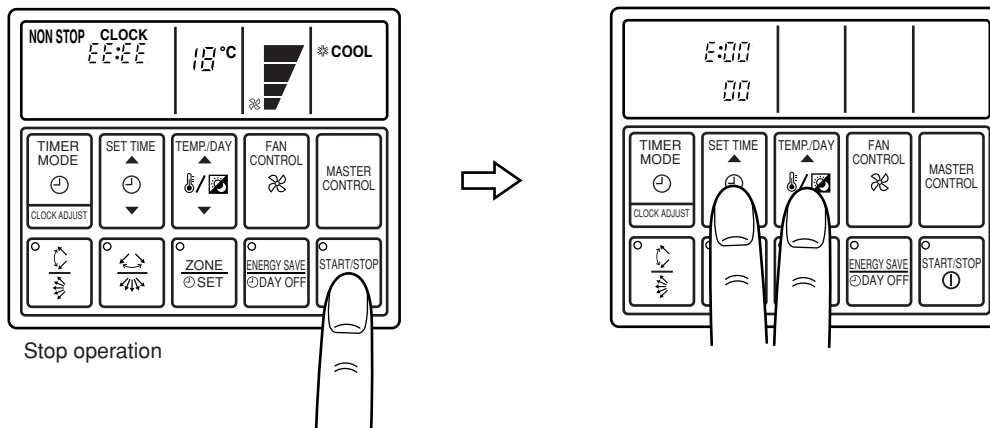


Table 10

Error cord	Error contents
E:00	No error
E:02	Model information abnormal
E:04	Power supply frequency abnormal
E:06	EEPROM access error
E:07	EEPROM deletion error
E:09	Room temperature thermistor error
E:0A	Indoor unit heat exchanger thermistor (middle) error
E:0B	Indoor unit heat exchanger thermistor (inlet) error
E:0C	Indoor unit heat exchanger thermistor (outlet) error

Error cord	Error contents
E:0d	Blower temperature thermistor error
E:11	Drain abnormal
E:12	Room temperature abnormal
E:13	Indoor unit fan error
E:1F	Transmission error
E:20	Node setting error
E:21	Parallel communication error
E:32	Outdoor unit error

- To stop test running, press the START/STOP button.
- For the operation method, refer to the operating manual and perform operation check.
- Check that there are no abnormal sounds or vibration sounds during test running.

(2) Standard wireless remote controller

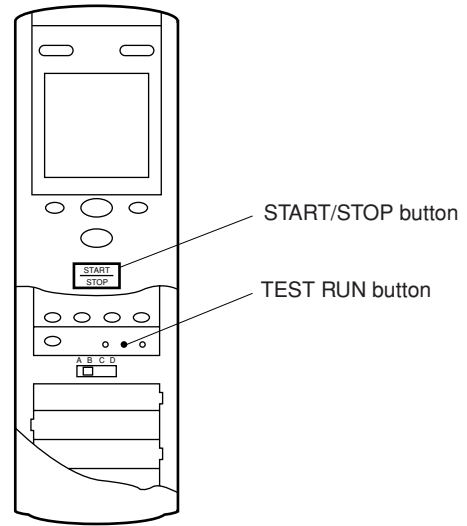
- Press the remote control unit test run button while the air conditioner is running.
- At the end of test running, press the remote control unit start-stop button (Fig. 46).

Operation can be checked by lighting and flashing of the display section OPERATION and TIMER lamps.
Perform judgement in accordance with the following.

- Test running

When the air conditioner is run by pressing the remote control unit test run button, the OPERATION and TIMER lamps flash slowly at the same time.

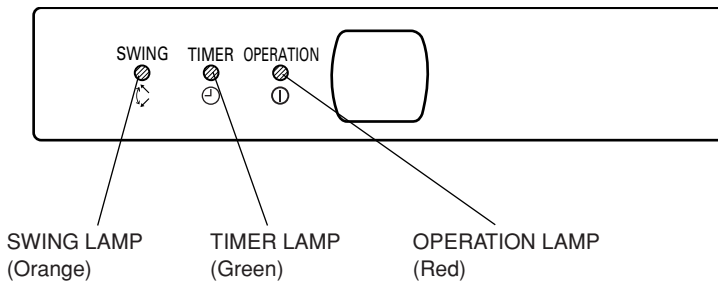
Fig. 46



9. AN ERROR DISPLAY

- Run the air conditioner in accordance with the operating manual.

Fig. 47



Operation can be checked by lighting and flashing of the grille display section OPERATION and TIMER lamps.
Perform judgement in accordance with the following.

- Test running

When the air conditioner is run by pressing the remote controller test run button, the OPERATION and TIMER lamps flash slowly at the same time.

- Error

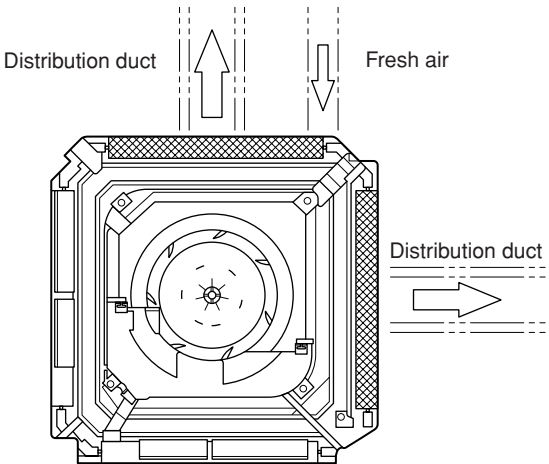
The OPERATION and TIMER lamps operate as follows (Table 11) according to the error contents.

Table 11

Error display			Error contents
OPERATION lamp	TIMER lamp	VERTICAL SWING lamp	
Blinks	Blinks	Goes off	Model information abnormal
Blinks	Blinks	Blinks	Power supply frequency abnormal
Pulses 2times	Blinks	Goes off	Room temperature thermistor error
Pulses 3times	Blinks	Pulses 1time	Indoor unit heat exchanger thermistor (inlet) error
Pulses 3times	Blinks	Pulses 2times	Indoor unit heat exchanger thermistor (middle) error
Pulses 3times	Blinks	Pulses 3times	Indoor unit heat exchanger thermistor (outlet) error
Pulses 4times	Blinks	Goes off	Drain abnormal
Pulses 5times	Blinks	Pulses 1time	Communication error (Indoor unit ↔ remote controller)
Pulses 5times	Blinks	Pulses 2times	Microcomputer error
Pulses 6times	Blinks	Goes off	Indoor unit fan error
Pulses 7times	Blinks	Goes off	Blower temperature thermistor error
Blinks	Pulses 3times	Pulses 3times	Outdoor unit error
Blinks	Pulses 4times	Pulses 1time	EEPOM access error
Blinks	Pulses 4times	Pulses 2times	EEPROM deletion error
Blinks	Pulses 5times	Pulses 1time	Transmission error
Blinks	Pulses 5times	Pulses 2times	Node setting error
Blinks	Pulses 6times	Goes off	Parallel communication error
Blinks	Pulses 7times	Goes off	Room temperature abnormal

10. OPENING THE DUCT CONNECTION HOLE

Fig. 48



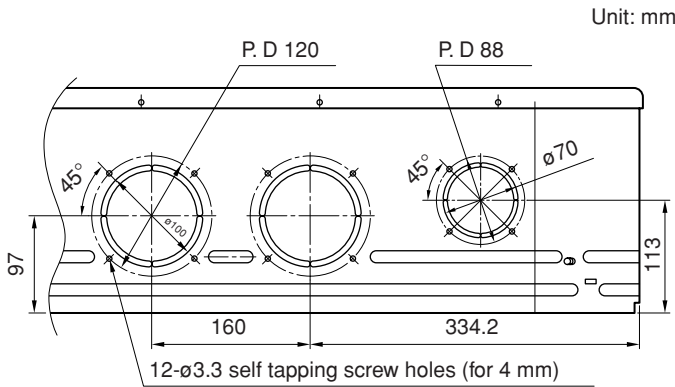
⚠ CAUTION

- ① When performing hole opening work, be careful not to damage the drain pan.
- ② When connecting the distribution duct, to make the air flow easily, block the outlet port with the blower cover insulation as shown by the hatched lines in Fig. 48. For the blocking direction, refer to Fig. 35.

1. DIMENSION

Screw position and connection hole which are fresh air duct and distribution duct.

Fig. 49

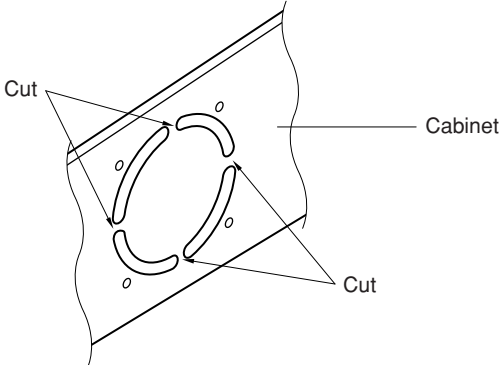


2. DISTRIBUTION DUCT AND FRESH AIR DUCT HOLE PROCESSING

Use the distribution duct hole and fresh air duct hole by removing the insulation material as shown in Fig. 49.

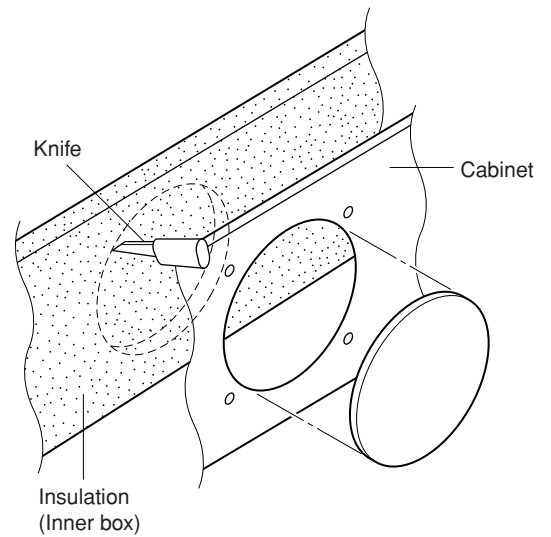
- Cut off the part (Cabinet) indicated by the arrow in Fig. 50 with nippers, needle nose pliers, etc.

Fig. 50



- Open the holes and cut the insulation with a knife.
 - * Be careful not to damage the internal parts.
 - * Be careful not to cut yourself on the cutout in the metal plate.
 - * Please remove the insulation (inner box) left over after cutting.
- Connect the distribution duct.
 - * When mounting the duct, block the gap so that there is no cold air leakage.
 - * Insulate the duct and cut connection.

Fig. 51



⚠ CAUTION

The air conditioner cannot take in fresh air by itself. When connecting a fresh air duct, always use a duct fan.

3. CHECKING DRAINAGE

To check the drain, remove the water cover and fill with 2 to 3 ℓ of water as shown in Fig. 52. The drain pump operates when operating in the cooling mode.

Fig. 52

