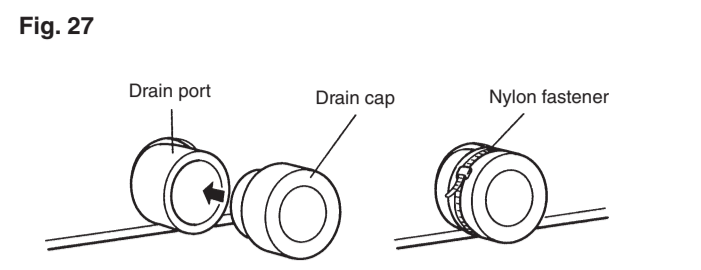




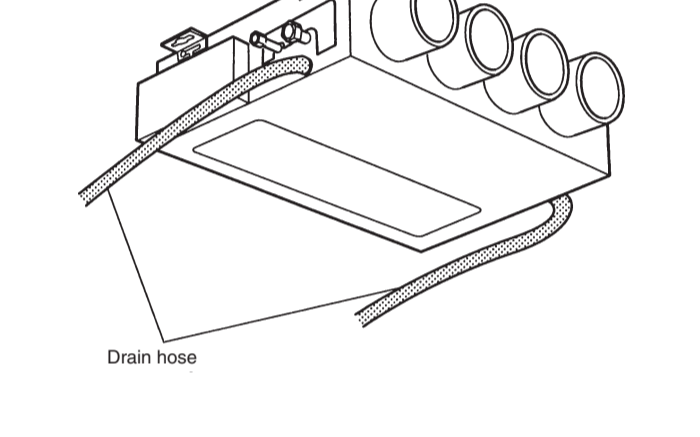
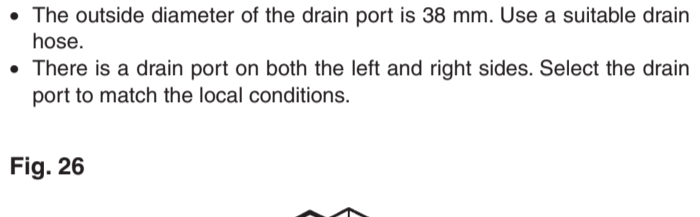
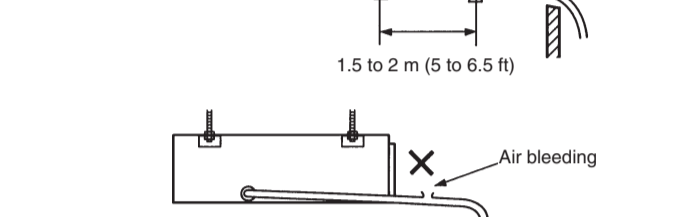
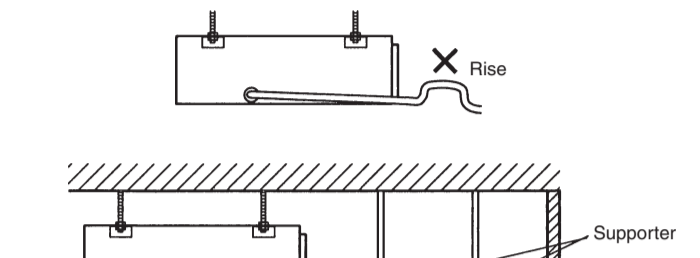
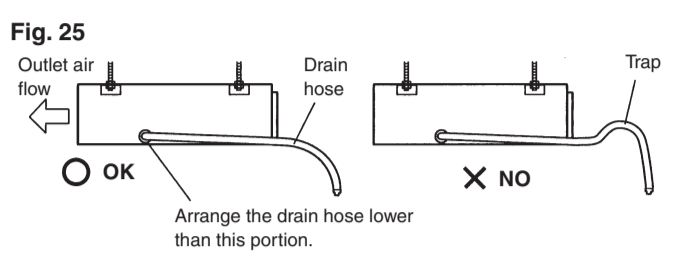
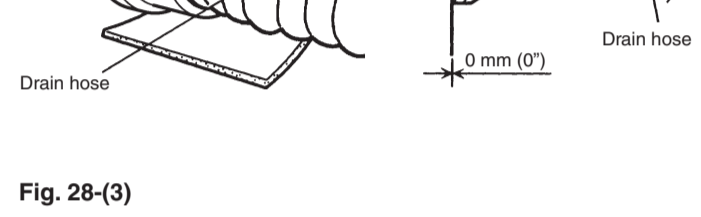
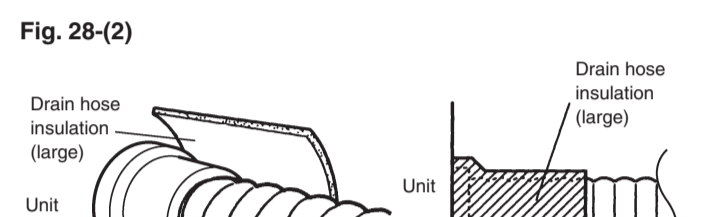
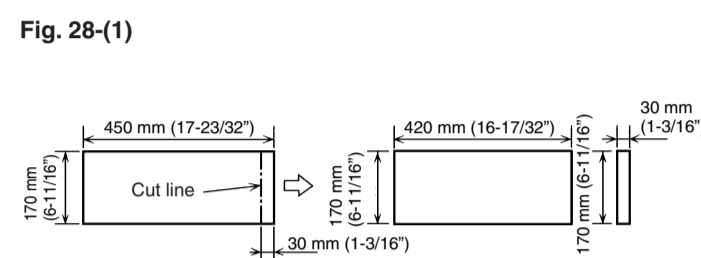
# 6 INSTALLING DRAIN HOSE

- When the unit is shipped from the factory, the drain port is on the left side (control box side).
- When using the drain port on the right side of the unit, reinstall the drain cap to the left side drain port.



**CAUTION**  
Always check that the drain cap is installed to the unused drain port and is fastened with the nylon fastener. If the drain cap is not installed, or is not sufficiently fastened by the nylon fastener, water may drip during the cooling operation.

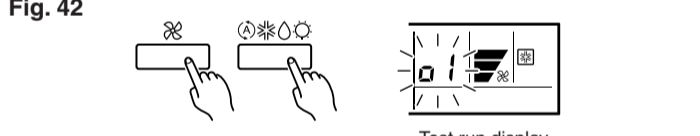
- Cut the drain hose insulation at a position approximately 30 mm from the end with cutters, etc. (Fig. 28-1)
- Stick the large drain hose insulation at the drain hose installation side. (Fig. 28-2)
- Stick the small drain hose insulation at the drain cap side. (Fig. 28-3)



# 10 TEST RUN

**CAUTION**  
Supply power to the crankcase heater for at least 12 hours before the start of operation in winter.

- Stop the air conditioner operation.
- Press the master control button and the fan control button simultaneously for 2 seconds or more to start the test run.



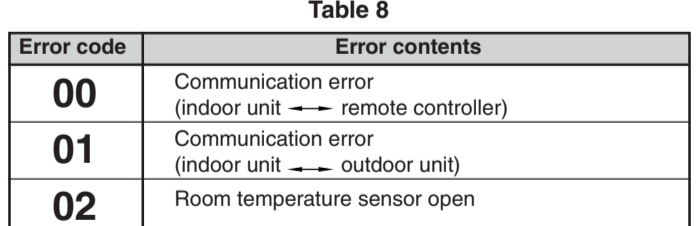
- Press the start/stop button to stop the test run.

## [SELF-DIAGNOSIS]

When the error indication "E.EE" is displayed, follow the following items to perform the self-diagnosis. "E.EE" indicates an error has occurred.

### 1. REMOTE CONTROLLER DISPLAY

- Stop the air conditioner operation.
- Press the set temperature buttons  $\Delta$  /  $\nabla$  simultaneously for 5 seconds or more to start the self-diagnosis.



### 2. OUTDOOR UNIT LEDs

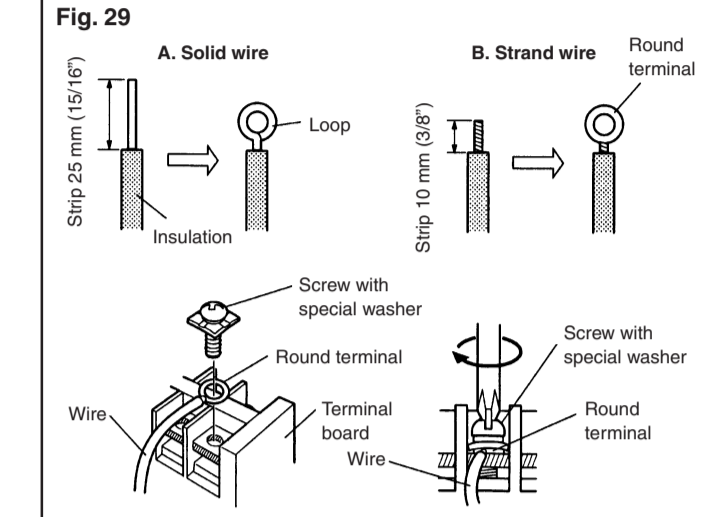
Heat & Cool model (reverse cycle) only  
When a malfunction occurs in the outdoor unit, the LEDs on the circuit board light to indicate the error. Refer to the following table for the description of each error according to the LEDs.

Error code	Error contents
00	Communication error (indoor unit ↔ remote controller)
01	Communication error (indoor unit ↔ outdoor unit)
02	Room temperature sensor open
03	Room temperature sensor short-circuited
04	Indoor heat exchanger temperature sensor open
05	Indoor heat exchanger temperature sensor short-circuited
06	Outdoor heat exchanger temperature sensor open
07	Outdoor heat exchanger temperature sensor short-circuited
08	Power source connection error
09	Floater switch operated
0A	Outdoor temperature sensor open
0b	Outdoor temperature sensor short-circuited
0c	Discharge pipe temperature sensor open
0d	Discharge pipe temperature sensor short-circuited
0E	Outdoor high pressure abnormal
0F	Discharge pipe temperature abnormal

# 7 ELECTRICAL WIRING

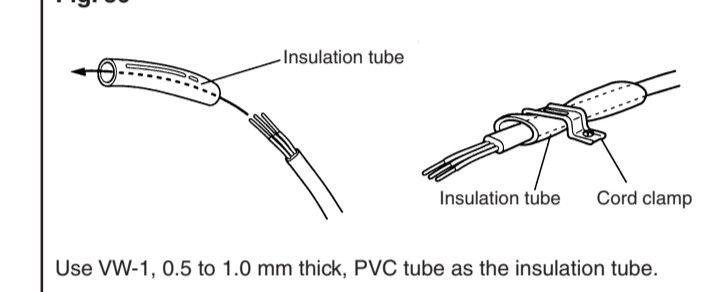
## HOW TO CONNECT WIRING TO THE TERMINALS

- For solid core wiring (or F-cable)**
  - Cut the wire end with a wire cutter or wire-cutting pliers, then strip the insulation to about 25 mm (15/16") of expose the solid wire.
  - Using a screwdriver, remove the terminal screw(s) on the terminal board.
  - Using pliers, bend the solid wire to form a loop suitable for the terminal screw.
  - Shape the loop wire properly, place it on the terminal board and tighten securely with the terminal screw using a screwdriver.
- For strand wiring**
  - Cut the wire end with a wire cutter or wire-cutting pliers, then strip the insulation to about 10 mm (3/8") of expose the strand wiring.
  - Using a screwdriver, remove the terminal screw(s) on the terminal board.
  - Using a round terminal fastener or pliers, securely clamp a round terminal to each stripped wire end.
  - Position the round terminal wire, and replace and tighten the terminal screw with a screwdriver.



## HOW TO FIX CONNECTION CORD AND POWER CORD AT THE CORD CLAMP

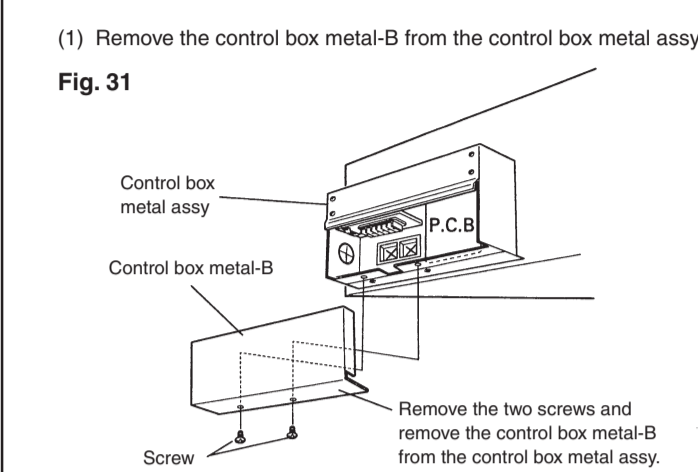
After passing the connection cord and power cord through the insulation tube, fasten it with the cord clamp.



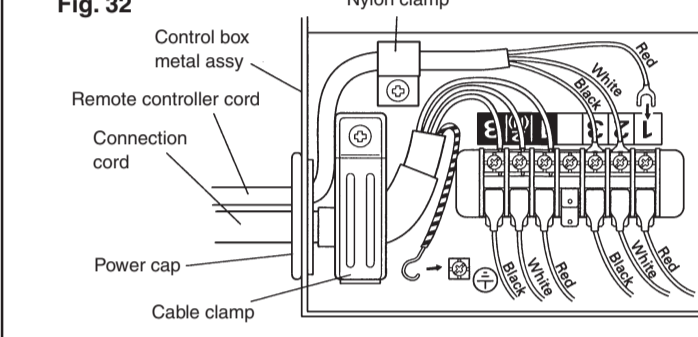
**CAUTION**  
Use VW-1, 12 mm diameter, 0.5 to 1.0 mm thick, PVC tube as the insulation tube.

# 1. INDOOR UNIT SIDE

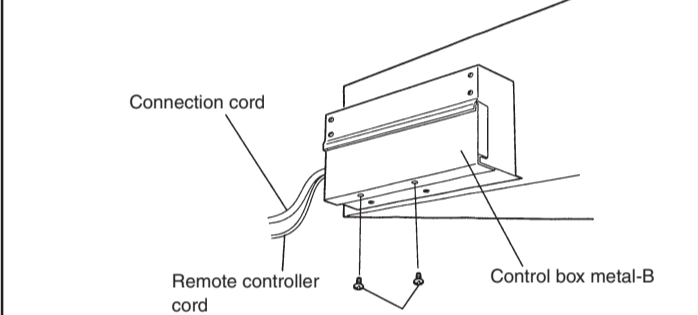
- WARNING**
- Before starting work, check that power is not being supplied to the indoor unit and outdoor unit.
  - Match the terminal board numbers and connection cord colors with those of the outdoor unit. Erroneous wiring may cause burning of the electric parts.
  - Connect the connection cords firmly to the terminal board. Imperfect installation may cause a fire.
  - Always fasten the outside covering of the connection cord with the cord clamp. (If the insulator is chafed, electric leakage may occur.)
  - Always connect the ground wire.



- Connection cord and remote controller cord connections.
  - Clamp the connection cord with the cable clamp and the remote controller cord with the nylon clamp.
  - Connect the connection cord to the terminals with the white characters on the terminal nameplate.
  - Connect the remote controller cord to the terminals with the black characters on the terminal nameplate.



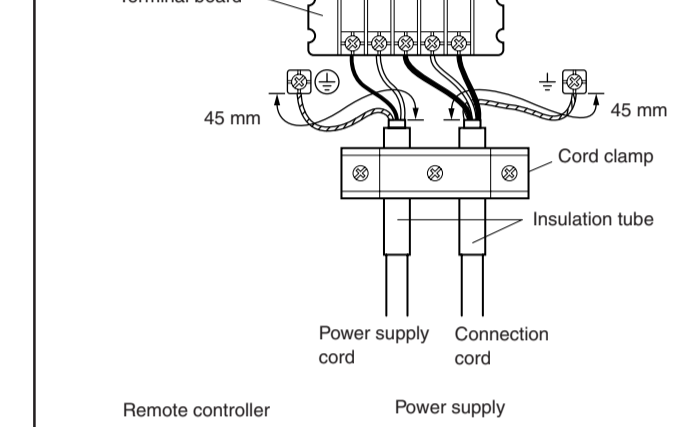
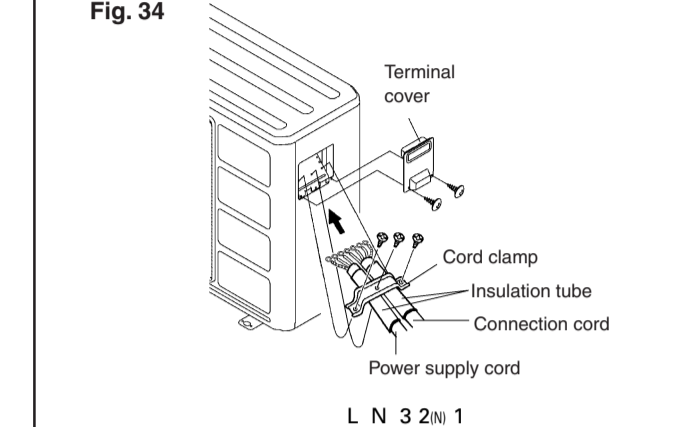
- Control box metal-B installation  
Fasten control box metal-B with the two screws.  
For the connection cord outlet port see Fig. 33.



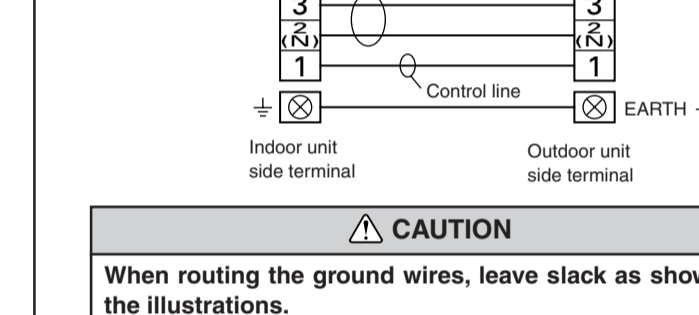
# 2. OUTDOOR UNIT SIDE

- WARNING**
- Before starting work, check that power is not being supplied to the indoor unit and outdoor unit.
  - Match the terminal board numbers and connection cord colors with those of the indoor unit side. Erroneous wiring may cause burning of the electric parts.
  - Connect the connection cords and the power supply cord firmly to the terminal board. Imperfect installation may cause a fire.
  - Always fasten the outside covering of the connection cord with the cord clamp. (If the insulator is chafed, electric leakage may occur.)
  - Always connect the ground wire.

- Remove the terminal cover of the outdoor unit, and insert the end of the connection cord and the power supply cord into the terminal board.
- Fasten the connection cord and the power supply cord with the cord clamps, and install the terminal cover.



- Remote controller cord installation  
Fasten remote controller cord with the two screws.  
For the connection cord outlet port see Fig. 33.



# 8 POWER

- WARNING**
- The rated voltage of this product is 230 V A.C. 50 Hz.
  - Before turning on the verify that the voltage is within the 198 V to 264 V range.
  - Always use a special branch circuit and install a special receptacle to supply power to the air conditioner.
  - Use a special branch circuit breaker and receptacle matched to the capacity of the air conditioner. (Fuse/Breaker capacity: 30 A)
  - The special branch circuit breaker is installed in the permanent wiring. Always use a circuit that can trip all the poles of the wiring and has an isolation distance of at least 3 mm between the contacts of each pole.
  - Perform wiring work in accordance with standards so that the air conditioner can be operated safely and positively.
  - Install a leakage special branch circuit breaker in accordance with the related laws and regulations and electric company standards.

**CAUTION**  
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.

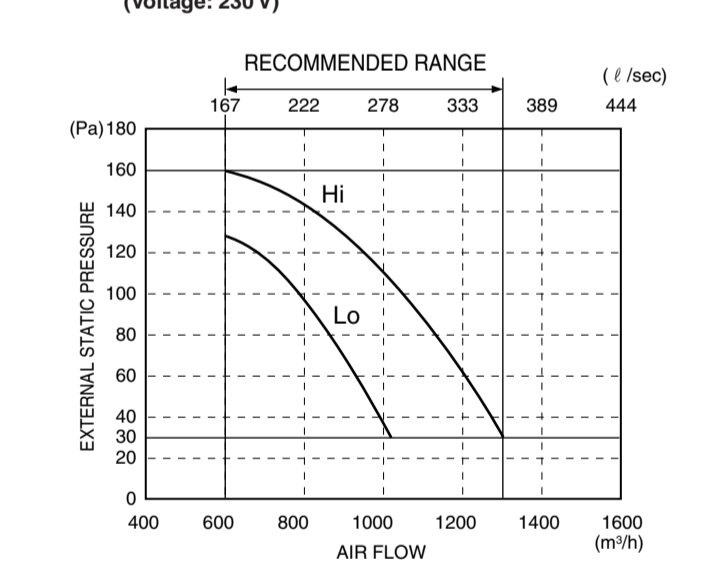
- When the voltage is low and the air conditioner is difficult to start, contact the power company the voltage raised.
- This air conditioner must be connected to a power source that has an electrical impedance of 0.159 Ω or less or has a supply current of 100 A or greater. If the power supply does not meet the specifications, contact the power company.

# 9 REMOTE CONTROLLER SETTING

- CAUTION**
- In order to detect the room temperature correctly when using the temperature sensor of the remote controller, do not install the remote controller in a place where it will be exposed to direct sunlight or directly below the air outlet of the indoor unit.
  - When installing the remote controller and cord near a source of electromagnetic waves, separate the remote controller from the source of the electromagnetic waves and use shielded cord.
  - Do not touch the remote controller PC board and PC board parts directly with your hands.

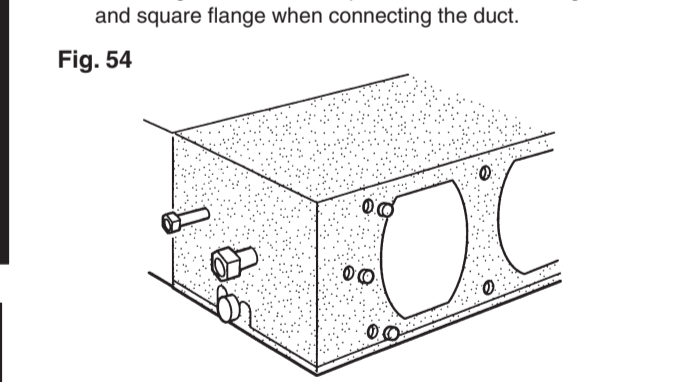
# 12 STATIC PRESSURE CHARACTERISTIC

Fig. 50 FAN PERFORMANCE AND AIR FLOW EXTERNAL STATIC PRESSURE (Voltage: 230 V)

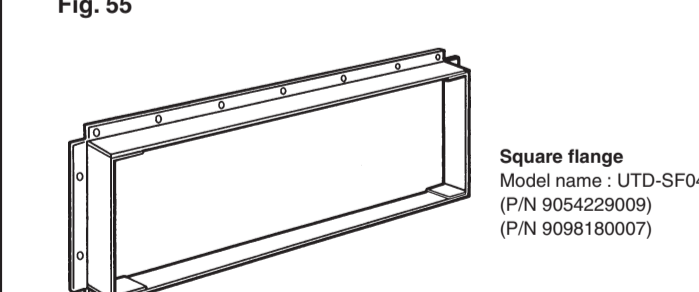


# 16 FRESH AIR INTAKE (Processing before use)

- When taking in fresh air, cut a slit shaped cabinet in the left side of the outer case as shown in Fig. 58 with nippers.
- Install the round flange (option parts) to the fresh air intake.



# 14 INTAKE PORT REAR COVER DIMENSIONS



# 15 INTAKE PORT

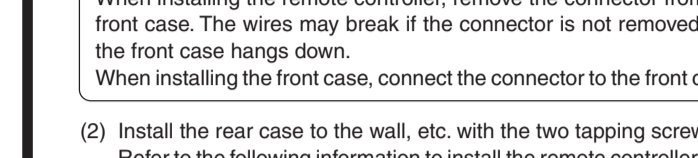
- The square flange (rear side) and panel (intake panel) are installed at the factory at the places shown in Fig. 57.
- When taking in air from the bottom side, reinstall the square flange (rear side) and panel (intake panel).

**CAUTION**  
When air is taken in from the bottom side, the operating sound of the product will easily enter the room. Install the product and intake grilles where the effect of the operating sound is small.

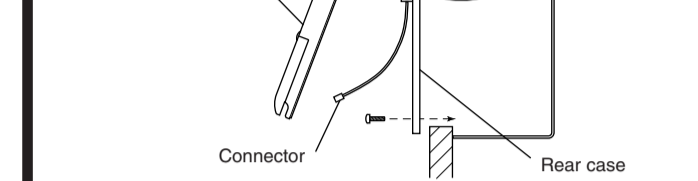


# 1. INSTALLING THE REMOTE CONTROLLER

- Open the operation panel on the front of the remote controller, remove the two screws indicated in the following figure, and then remove the front case of the remote controller.

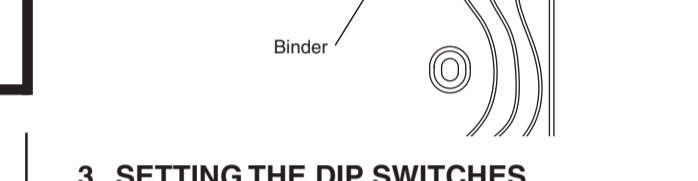


- Install the rear case to the wall, etc. with the two tapping screws. Refer to the following information to install the remote controller wires.

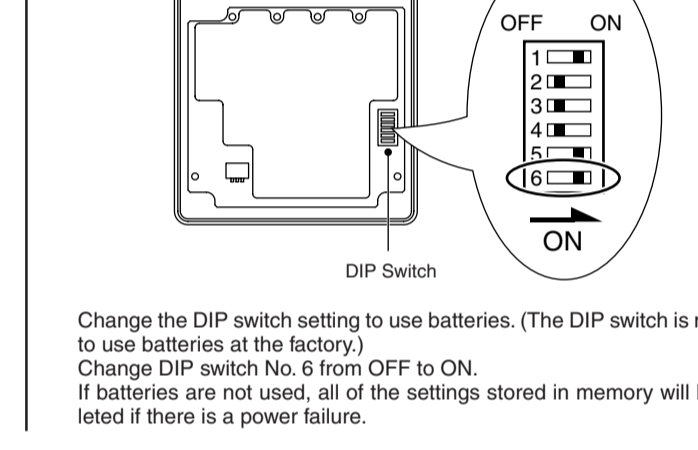


# 2. ROUTING THE REMOTE CONTROLLER WIRES

- Install the remote controller wires to the terminals on the top of the rear case as shown in the following figure.
- Fasten the wires with the binder.
- If the remote controller wires run through the room, use a tool to cut away the thin area on the upper corner of the front case.



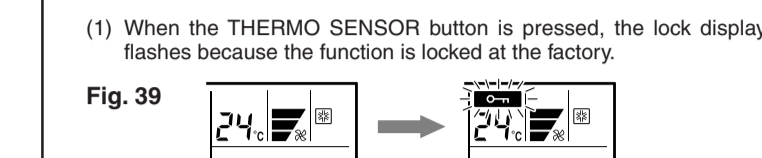
# 3. SETTING THE DIP SWITCHES (When using a battery (memory backup))



Change the DIP switch setting to use batteries. (The DIP switch is not set to use batteries at the factory.)  
Change DIP switch No. 6 from OFF to ON.  
If batteries are not used, all of the settings stored in memory will be deleted if there is a power failure.

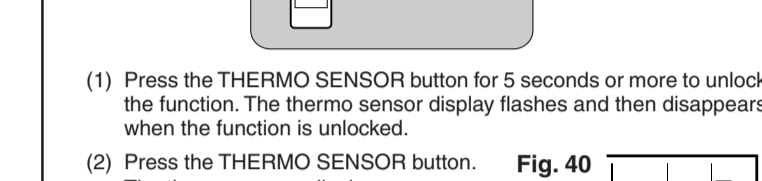
# 4. SETTING THE ROOM TEMPERATURE DETECTION LOCATION

- The detection location of the room temperature can be selected from the following three examples. Choose the detection location that is best for the installation location.
- A. Indoor unit setting (factory setting)**  
The room temperature is detected by the indoor unit temperature sensor.



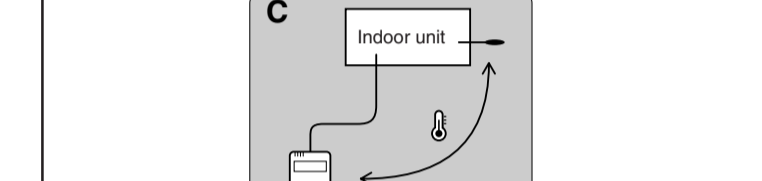
## B. Remote controller setting

- Press the THERMO SENSOR button for 5 seconds or more to unlock the function. The thermo sensor display flashes and then disappears when the function is unlocked.
- Press the THERMO SENSOR button. The thermo sensor display appears.
- Press the THERMO SENSOR button again for 5 seconds or more to lock the function. The thermo sensor display flashes and then remains on when the function is locked.
- Make sure that the function is locked.



## C. Indoor unit/remote controller setting (room temperature sensor selection)

- Press the THERMO SENSOR button for 5 seconds or more to unlock the function. The thermo sensor display flashes and then disappears when the function is unlocked.
- Press the THERMO SENSOR button to select the temperature sensor of the indoor unit or the remote controller.



## NOTES

If the function to change the temperature sensor is used as shown in examples A and B (other than example C), be sure to lock the detection location. If the function is locked, the lock display will flash when the THERMO SENSOR button is pressed.

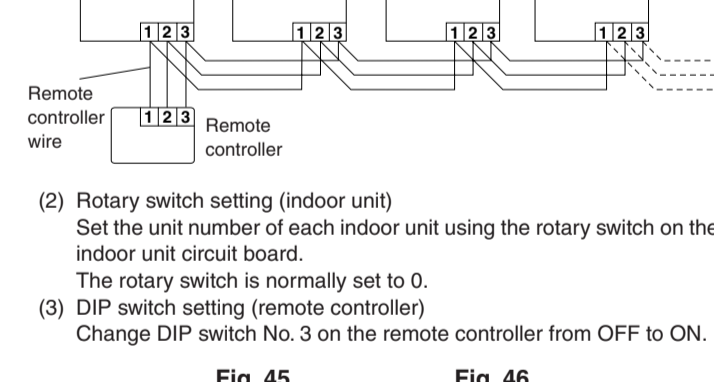
# 11 SPECIAL INSTALLATION METHODS

- CAUTION**
- When setting the rotary switch and DIP switches, do not touch any other parts on the circuit board directly with your bare hands.
  - Be sure to turn off the main power.

## 1. GROUP CONTROL SYSTEM

A number of indoor units can be operated at the same time using a single remote controller.

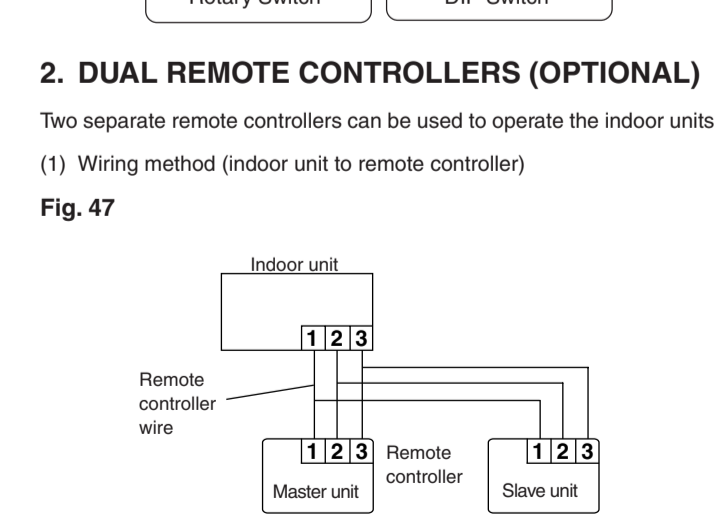
- Wiring method (indoor unit to remote controller)



## 2. DUAL REMOTE CONTROLLERS (OPTIONAL)

Two separate remote controllers can be used to operate the indoor units.

- Wiring method (indoor unit to remote controller)



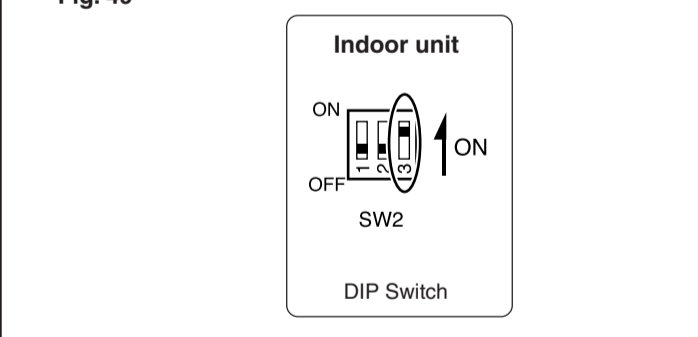
# 2. DIP SWITCH SETTING (remote controller)

Set the remote controller DIP switch Nos. 1 and 2 according to the following table.

Number of remote controllers	Master unit	
	DIP-SW No. 1	DIP-SW No. 2
1 (Normal)	ON	OFF
2 (Dual)	OFF	OFF

## 3. CANCELING AUTO RESTART

- DIP switch setting (indoor unit)  
Change the DIP switch (SW2) on the indoor unit circuit board from OFF to ON. The auto restart function will be canceled.



## [DIP-SWITCH SETTING]

● Indoor unit

NO.	SW state		Detail
	OFF	ON	
SW2	1	— * —	Remote sensor setting
DIP-Switch	2	Edge *	Control input setting
	3	Validity *	Auto restart setting

● Remote controller

NO.	SW state		Detail	
	OFF	ON		
DIP-Switch	1	—	Dual remote controller setting	
	2	*	Group control setting	
	3	One unit *	Multiple unit	
	4	Heat & Cool model	Cooling only model	
	5	Invalidity	Validity *	Auto changeover setting
	6	Invalidity *	Validity	Memory backup setting

\*: Factory setting