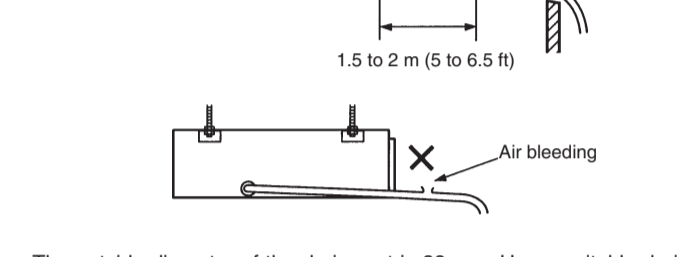
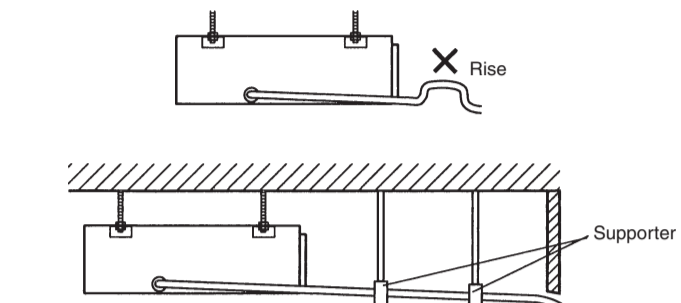
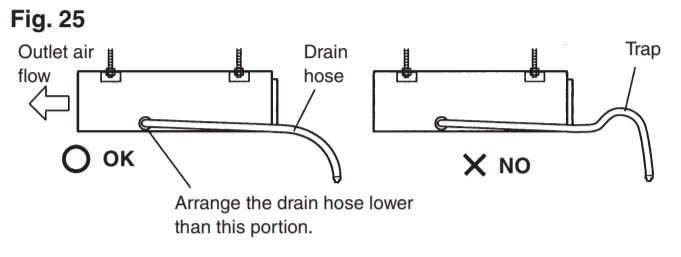


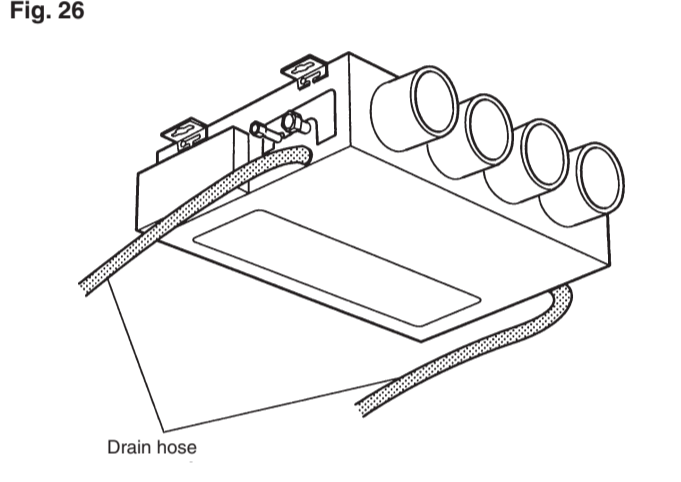
6 INSTALLING DRAIN HOSE

CAUTION
Install the drain hose 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 HOSE
• Install the drain hose with downward gradient (1/50 to 1/100) and so there are no rises or traps in the hose.
• Use general hard polyvinyl chloride pipe (VP25) [outside diameter 38 mm] and connect it with adhesive (polyvinyl chloride) so that there is no leakage.
• When the hose is long, install supporters.
• Do not perform air bleeding.
• Always heat insulate the indoor side of the drain hose.



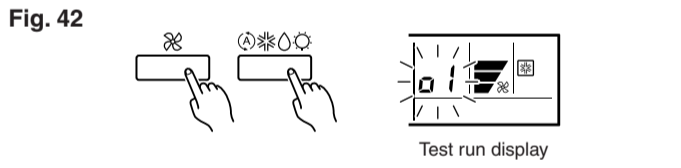
• The outside diameter of the drain port is 38 mm. Use a suitable drain hose.
• There is a drain port on both the left and right sides. Select the drain port to match the local conditions.



10 TEST RUN

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

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

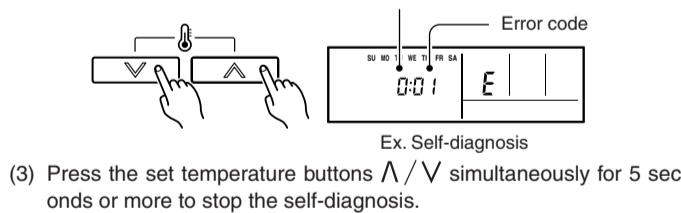


(3) Press the start/stop button to stop the test run.

[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

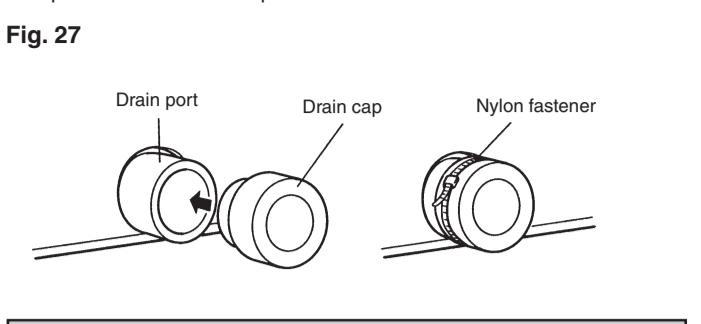
(1) Stop the air conditioner operation.
(2) Press the set temperature buttons Δ / ∇ simultaneously for 5 seconds or more to start the self-diagnosis.
Refer to the following tables for the description of each error code.



(3) Press the set temperature buttons Δ / ∇ simultaneously for 5 seconds or more to stop the self-diagnosis.

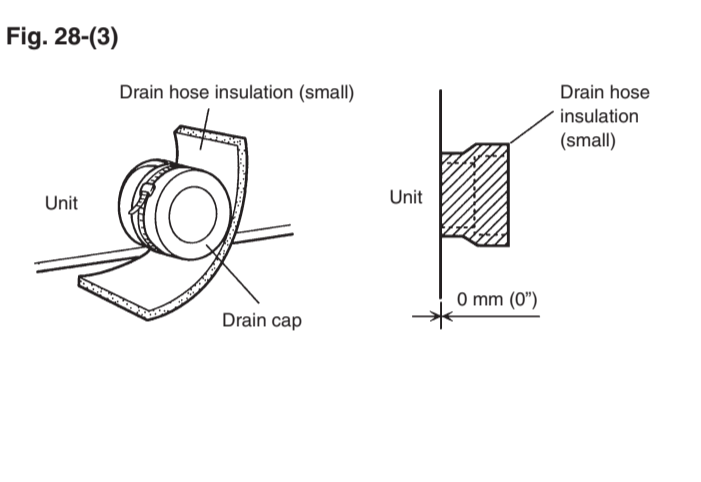
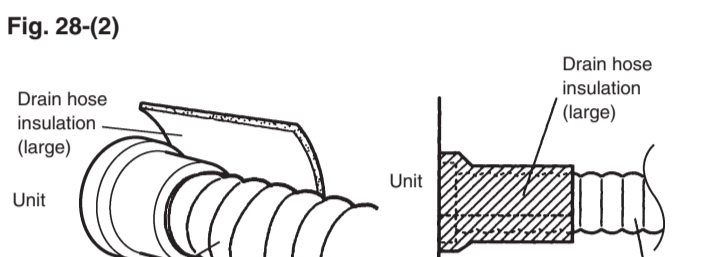
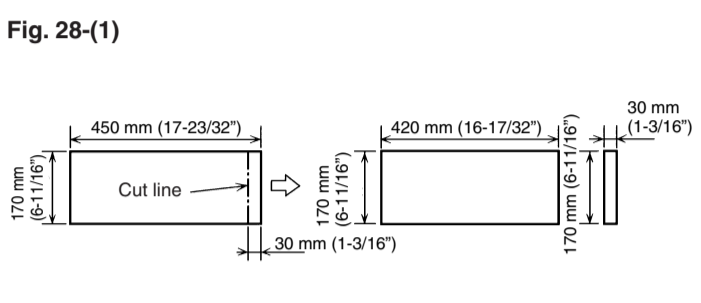
Error code	Error contents
00	Communication error (indoor unit → remote controller)
01	Communication error (indoor unit → outdoor unit)
02	Room temperature sensor open
03	Room temperature sensor short-circuited
04	Indoor heat exchanger temperature sensor open
05	Indoor heat exchanger temperature sensor short-circuited
06	Outdoor heat exchanger temperature sensor open
07	Outdoor heat exchanger temperature sensor short-circuited
08	Power source connection error
09	Floating 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



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)



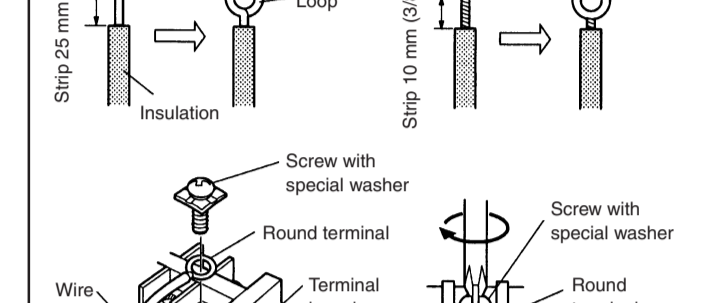
CAUTION
Use VW-1, 12 mm diameter, 0.5 to 1.0 mm thick, PVC tube as the insulation tube.

1. INDOOR UNIT SIDE

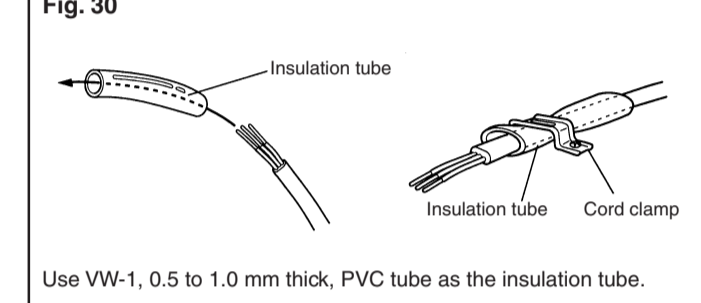
WARNING
Before starting work, check that power is not being supplied to the indoor unit and outdoor unit.

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") of 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") of 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 with a screwdriver.



HOW TO FIXED 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.

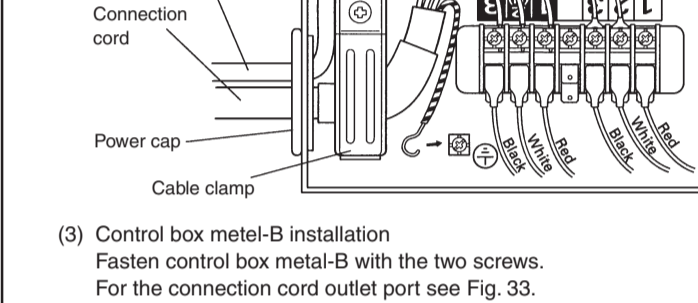
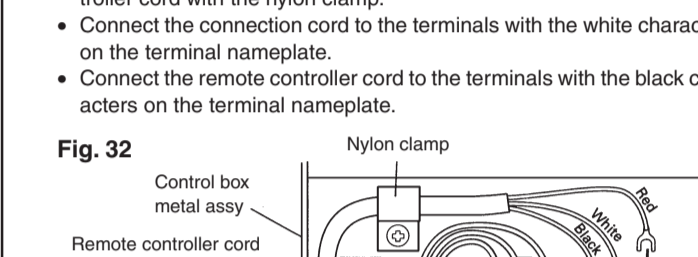
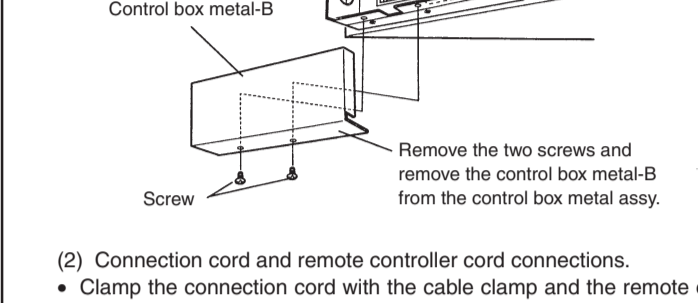
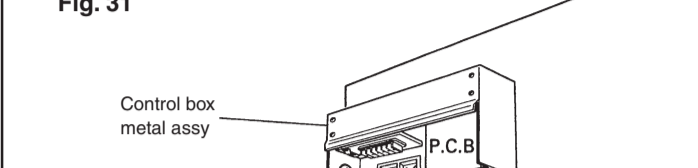


CAUTION
Use VW-1, 12 mm diameter, 0.5 to 1.0 mm thick, PVC tube as the insulation tube.

2. OUTDOOR UNIT SIDE

WARNING
Before starting work, check that power is not being supplied to the indoor unit and outdoor unit.

(1) 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.
(2) Fasten the connection cord and the power supply cord with the cord clamps, and install the terminal cover.

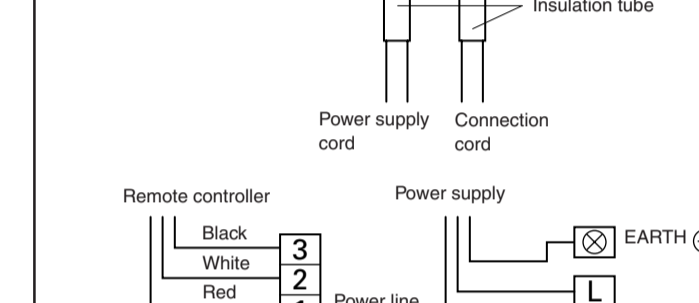
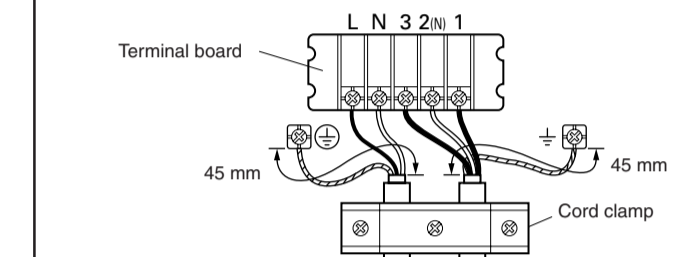
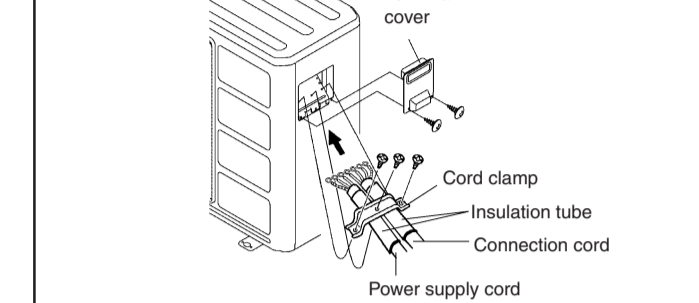
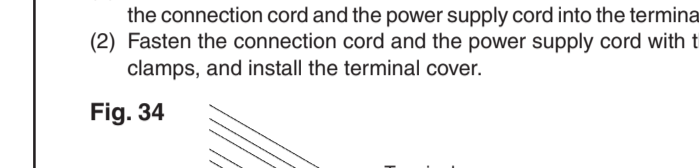


CAUTION
When routing the ground wires, leave slack as shown in the illustrations.

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.

(1) 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.
(2) When the voltage is low and the air conditioner is difficult to start, contact the power company the voltage raised.
(3) 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.



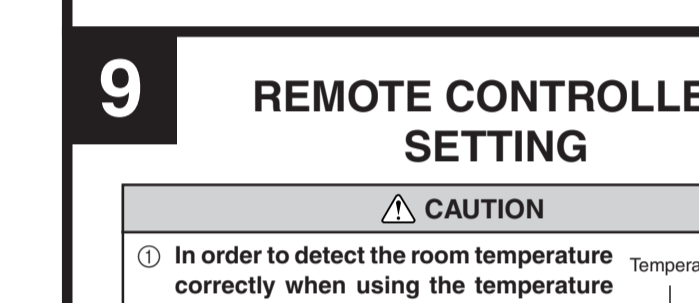
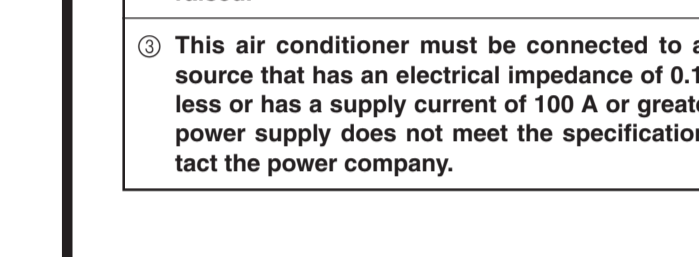
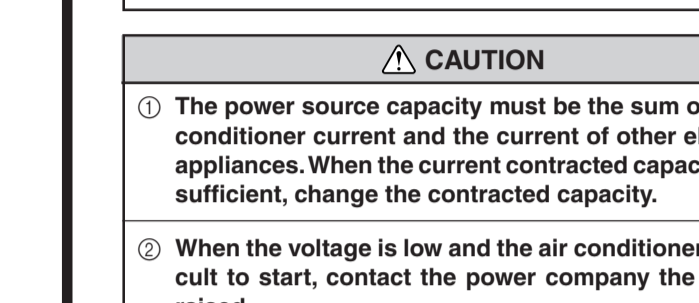
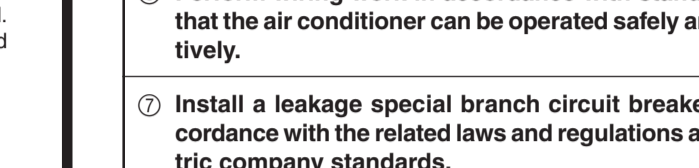
CAUTION
In order to detect the room temperature correctly when using the temperature sensor of the remote controller, do not install the remote controller in a place where it will be exposed to direct sunlight or directly below the air outlet of the indoor unit.

CAUTION
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.

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.

(1) 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.
(2) Press the THERMO SENSOR button. The thermo sensor display appears.
(3) 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.

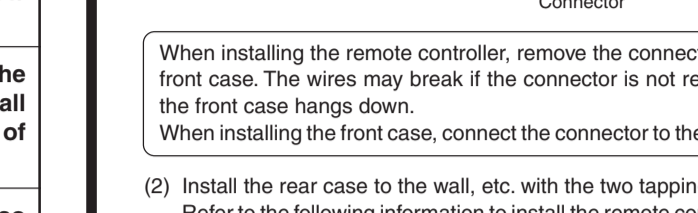


NOTES
If the function to change the temperature sensor is used as shown in examples A and B (other than example C), be sure to lock the detection location. If the function is locked, the lock display will flash when the THERMO SENSOR button is pressed.

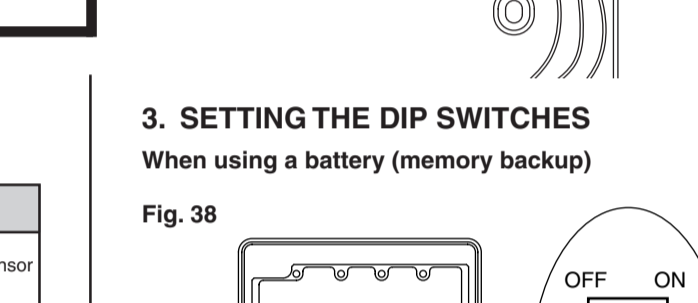
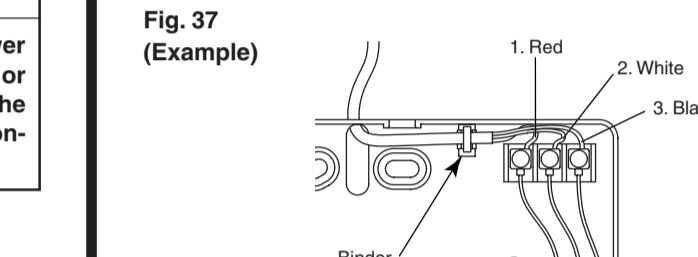
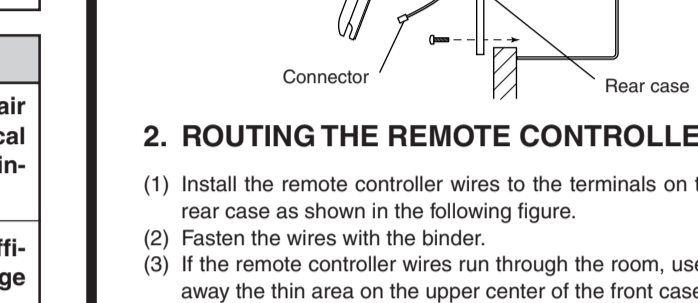
CAUTION
When routing the ground wires, leave slack as shown in the illustrations.

10 INSTALLING THE REMOTE CONTROLLER

(1) 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.



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

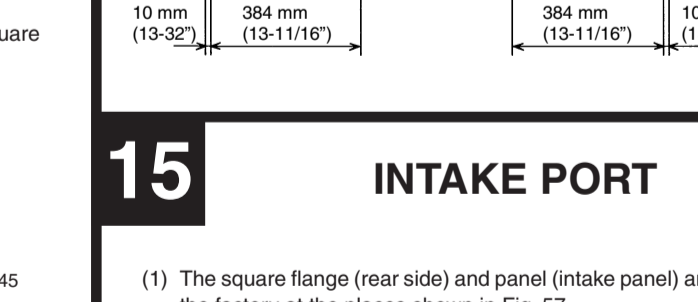
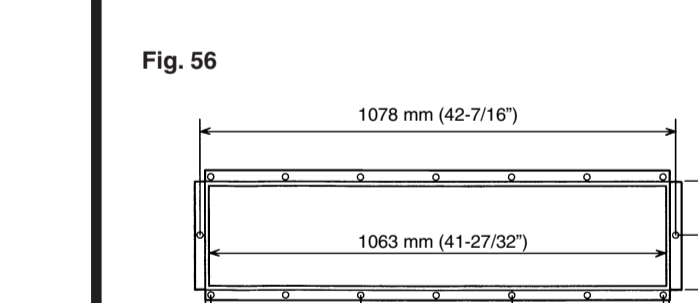
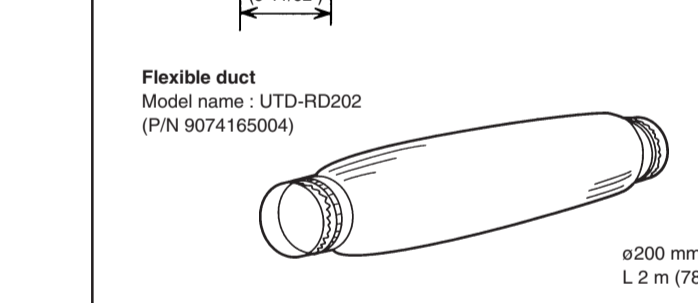


CAUTION
Change the DIP switch setting to use batteries. (The DIP switch is not set to use batteries at the factory.)
Change DIP switch No. 6 from OFF to ON.
If batteries are not used, all of the settings stored in memory will be deleted if there is a power failure.

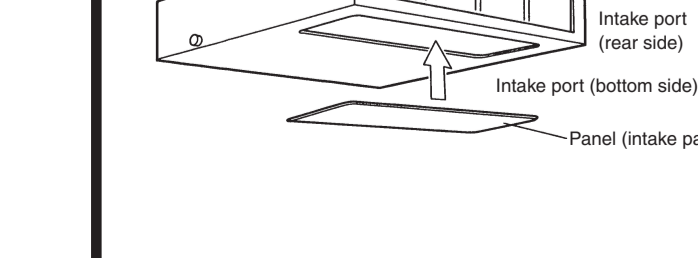
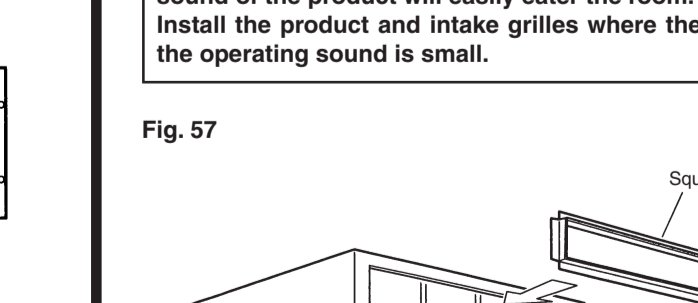
CAUTION
When installing the remote controller and cord near a source of electromagnetic waves, separate the remote controller from the source of the electromagnetic waves and use shielded cord.
Do not touch the remote controller PC board and PC board parts directly with your hands.

11 ROUTING THE REMOTE CONTROLLER WIRES

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

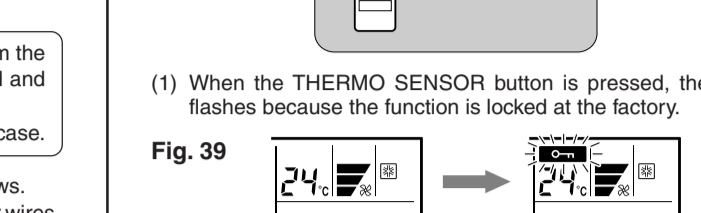


CAUTION
When routing the ground wires, leave slack as shown in the illustrations.

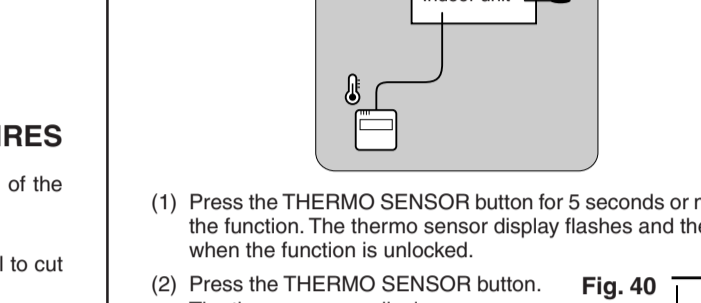


4. SETTING THE ROOM TEMPERATURE DETECTION LOCATION

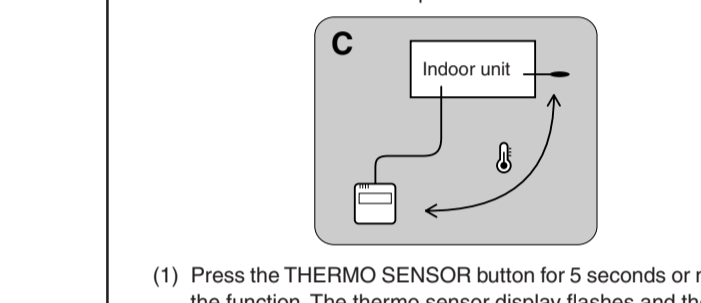
The detection location of the room temperature can be selected from the following three examples. Choose the detection location that is best for the installation location.
A. Indoor unit setting (factory setting)
The room temperature is detected by the indoor unit temperature sensor.



(1) When the THERMO SENSOR button is pressed, the lock display flashes because the function is locked at the factory.



B. Remote controller setting
The room temperature is detected by the remote controller temperature sensor.



(1) 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.
(2) Press the THERMO SENSOR button. The thermo sensor display appears.
(3) 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.

C. Indoor unit/remote controller setting (room temperature sensor selection)
The temperature sensor of the indoor unit or the remote controller can be used to detect the room temperature.

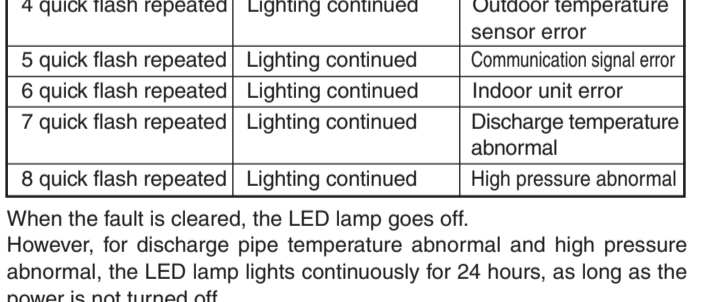
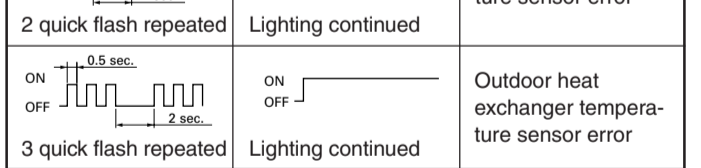
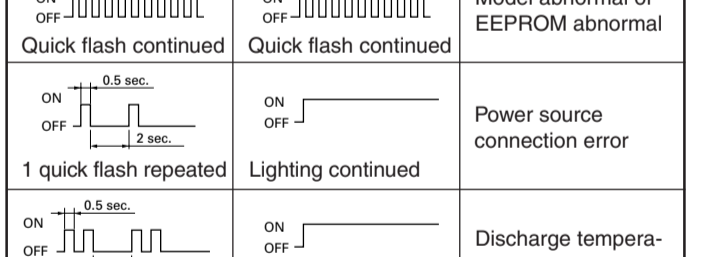
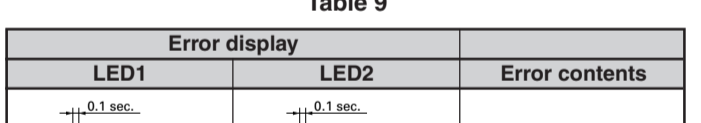
NOTES
If the function to change the temperature sensor is used as shown in examples A and B (other than example C), be sure to lock the detection location. If the function is locked, the lock display will flash when the THERMO SENSOR button is pressed.

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.



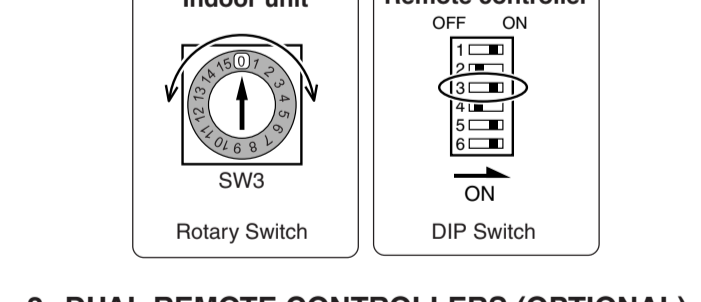
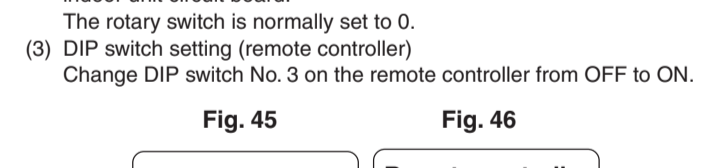
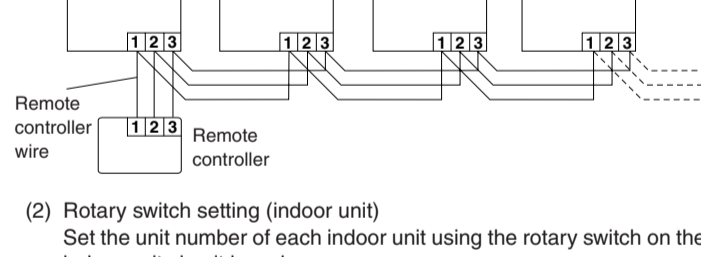
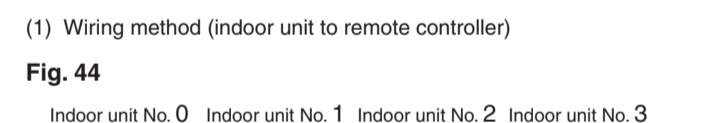
2. DUAL REMOTE CONTROLLERS (OPTIONAL)
Two separate remote controllers can be used to operate the indoor units.



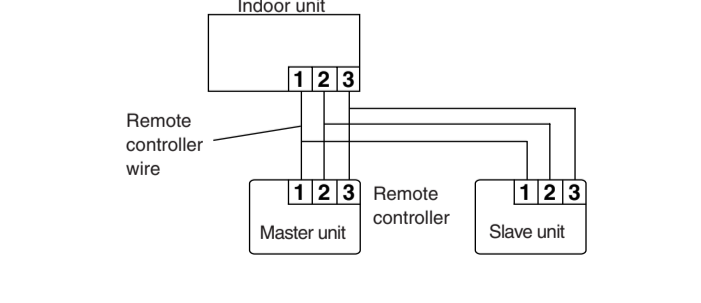
CAUTION
When setting the rotary switch and DIP switches, do not touch any other parts on the circuit board directly with your bare hands.
Be sure to turn off the main power.

1. GROUP CONTROL SYSTEM

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



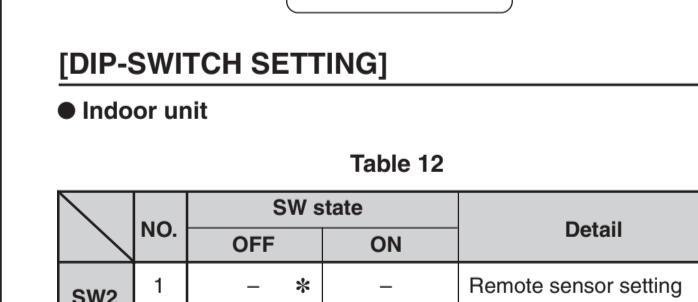
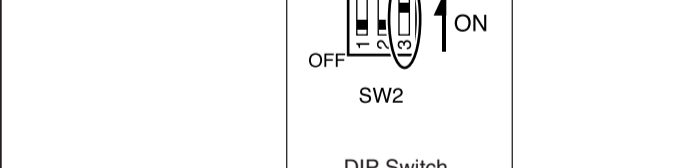
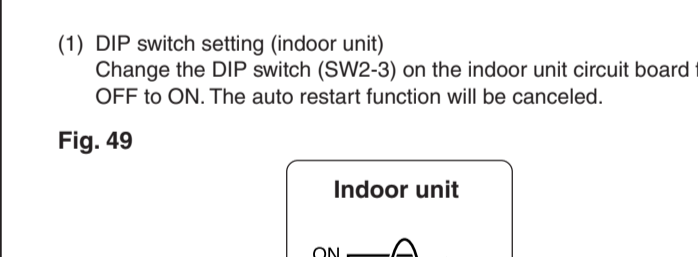
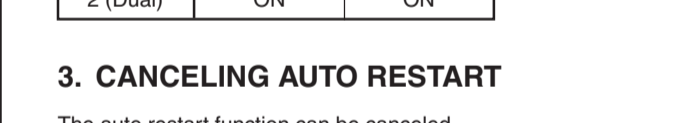
2. DUAL REMOTE CONTROLLERS (OPTIONAL)
Two separate remote controllers can be used to operate the indoor units.



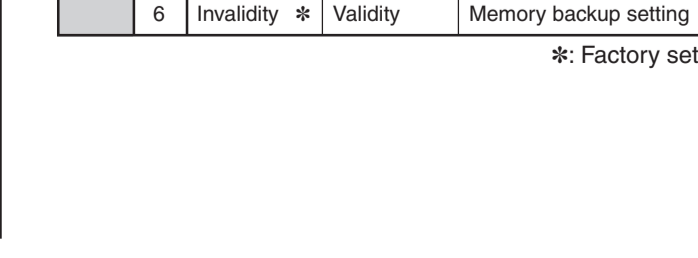
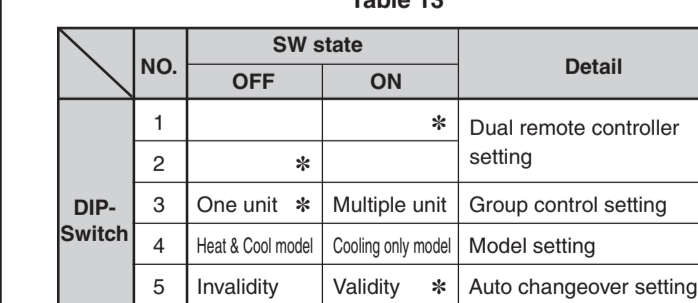
CAUTION
When setting the rotary switch and DIP switches, do not touch any other parts on the circuit board directly with your bare hands.
Be sure to turn off the main power.

1. GROUP CONTROL SYSTEM

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

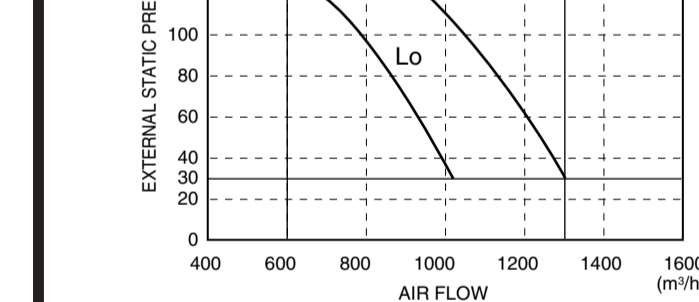


2. DUAL REMOTE CONTROLLERS (OPTIONAL)
Two separate remote controllers can be used to operate the indoor units.



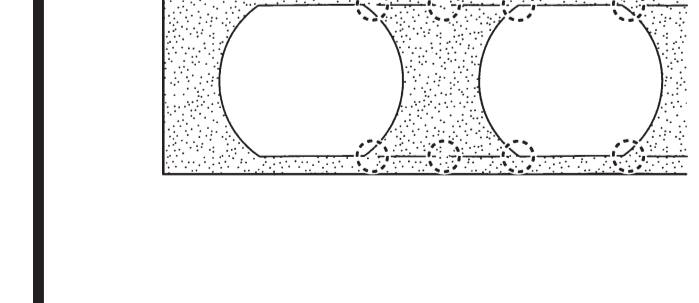
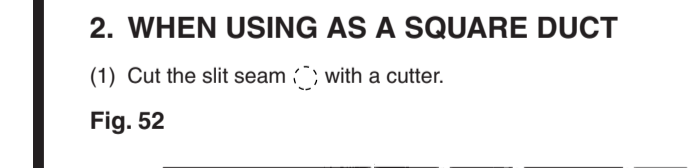
12 STATIC PRESSURE CHARACTERISTIC

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



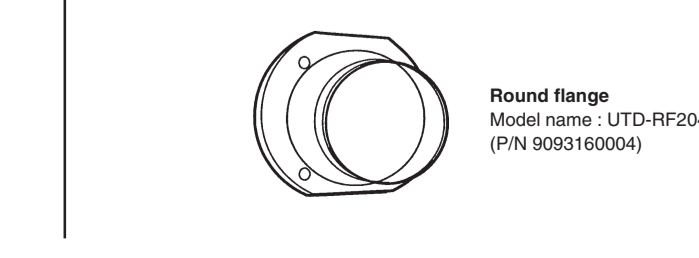
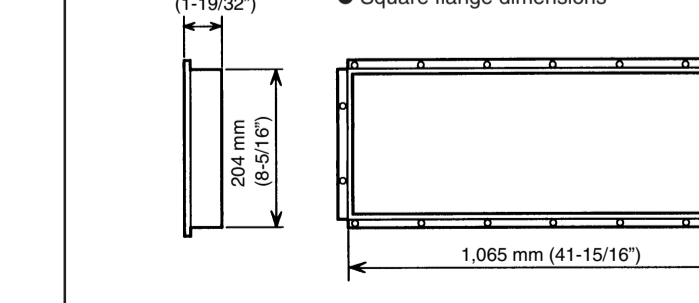
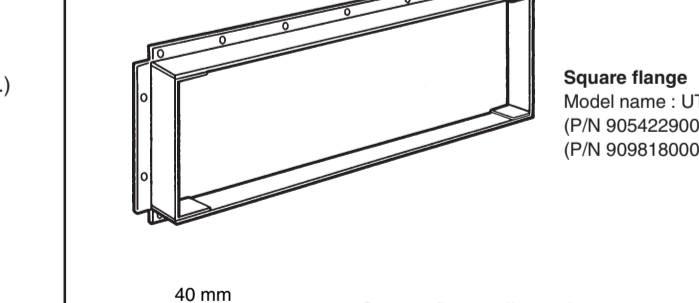
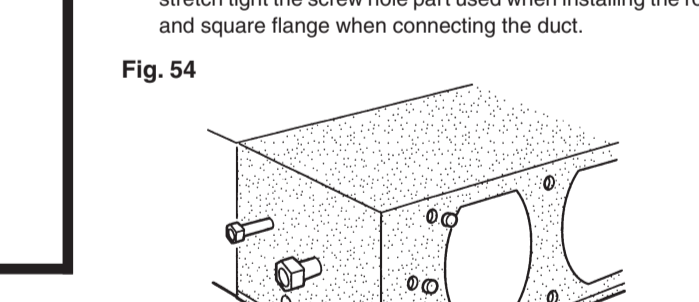
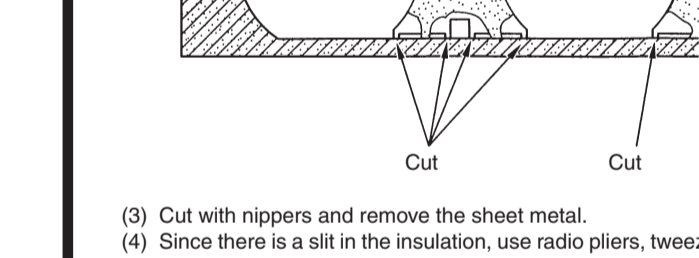
3. CANCELING AUTO RESTART
The auto restart function can be canceled.

(1) DIP switch setting (indoor unit)
Change the DIP switch (SW2-3) on the indoor unit circuit board from OFF to ON. The auto restart function will be canceled.

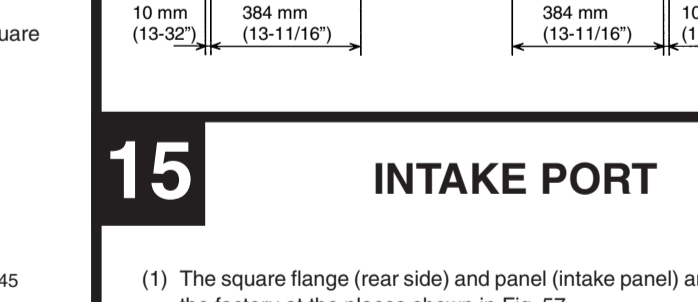
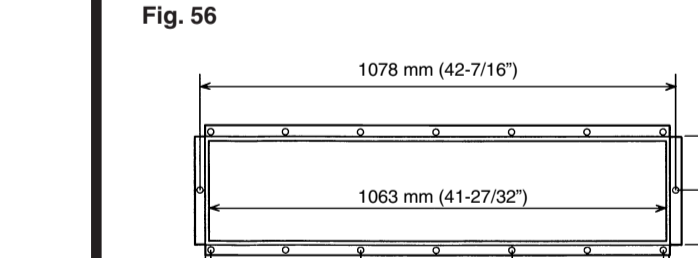
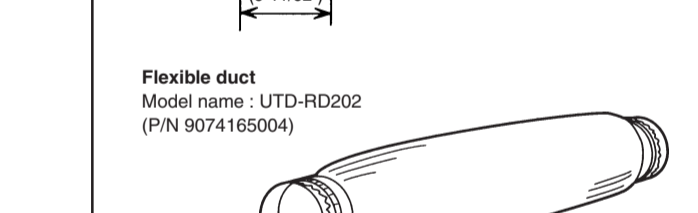


13 OUTLET DUCT CONNECTION

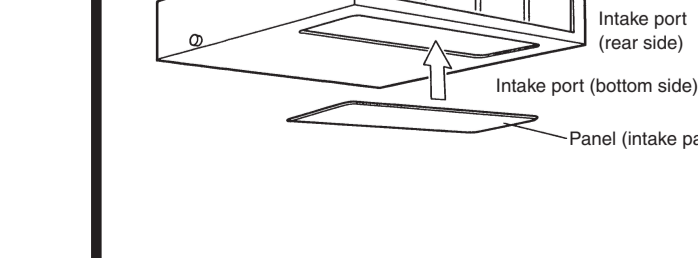
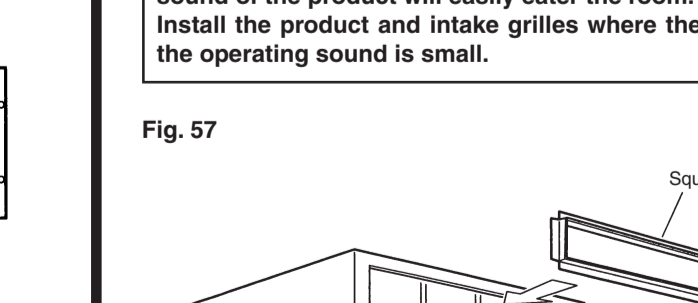
1. DUCT INSTALLATION PATTERN (CUT PART)



14 INTAKE PORT REAR COVER DIMENSIONS

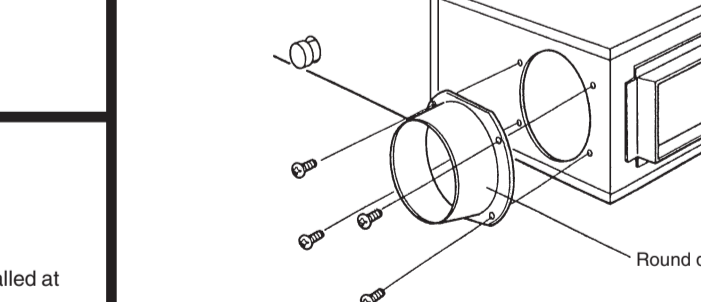
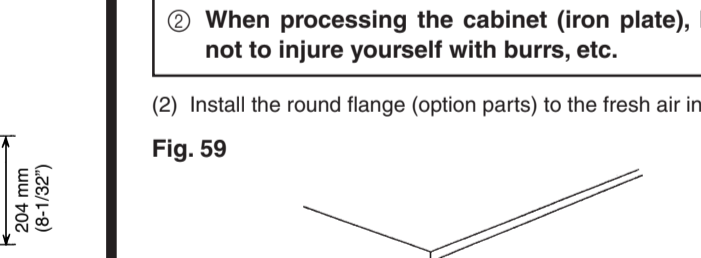
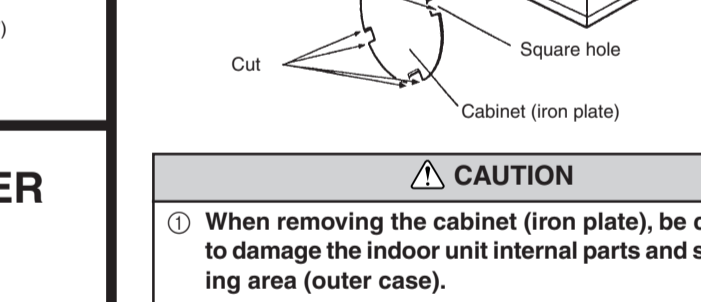


CAUTION
When air is taken in from the bottom side, the operating sound of the product will easily enter the room. Install the product and intake grilles where the effect of the operating sound is small.



16 FRESH AIR INTAKE (Processing before use)

(1) 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.
(2) Install the round flange (option parts) to the fresh air intake.



(3) Connect the duct to the round flange.
(4) Seal with a band and vinyl tape, etc. so that air does not leak from the connection.

