Duct Type
SPLIT TYPE AIR CONDITIONER
INSTALLATION INSTRUCTION SHEET
(PART NO. 9374815036)

⚠ **CAUTION**

R410A
REFRIGERANT

This Air Conditioner contains and operates with refrigerant R410A and Polyol Ester oil.

THIS PRODUCT MUST ONLY BE INSTALLED OR SERVICED BY QUALIFIED PERSONNEL.

Refer to Commonwealth, State, Territory and local legislation, regulations, codes, installation & operation manuals, before the installation, maintenance and /or service of this product.

Indoor unit is an appliance not accessible to the general public.

For authorized service personnel only.

⚠ DANGER	This mark indicates procedures which, if improperly performed, are most likely to result in the death of or serious injury to the user or service personnel.
⚠ 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.

⚠ **DANGER**

Never touch electrical components immediately after the power supply has been turned off. Electrical shock may occur. After turning off the power, always wait 5 minutes or more before touching electrical components.

This air conditioner uses new refrigerant HFC (R410A).

The basic installation work procedures are the same as conventional refrigerant models.
However, pay careful attention to the following points:

① Since the working pressure is 1.6 times higher than that of conventional refrigerant models, some of the piping and installation and service tools are special. (See the table below.) Especially, when replacing a conventional refrigerant model with a new refrigerant R410A model, always replace the conventional piping and flare nuts with the R410A piping and flare nuts.

② Models that use refrigerant R410A have a different charging port thread diameter to prevent erroneous charging with conventional refrigerant and for safety. Therefore, check beforehand. [The charging port thread diameter for R410A is 1/2 UNF 20 threads per inch.]

③ Be more careful that foreign matter (oil, water, etc.) does not enter the piping than with refrigerant models. Also, when storing the piping, securely seal the openings by pinching, taping, etc.

④ When charging the refrigerant, take into account the slight change in the composition of the gas and liquid phases, and always charge from the liquid phase side whose composition is stable.

Special tools for R410A

Tool name	Contents of change
Gauge manifold	Pressure is high and cannot be measured with a conventional gauge. To prevent erroneous mixing of other refrigerants, the diameter of each port has been changed. It is recommended the gauge with seals –0.1 to 5.3 MPa (–76 cmHg to 53 kgf/cm²) for high pressure. –0.1 to 3.8 MPa (–76 cmHg to 38 kgf/cm²) for low pressure.
Charge hose	To increase pressure resistance, the hose material and base size were changed.
Vacuum pump	A conventional vacuum pump can be used by installing a vacuum pump adapter.
Gas leakage detector	Special gas leakage detector for HFC refrigerant R410A.

Copper pipes
It is necessary to use seamless copper pipes and it is desirable that the amount of residual oil is less than 40 mg/10m. Do not use copper pipes having a collapsed, deformed or discolored portion (especially on the interior surface). Otherwise, the expansion valve or capillary tube may become blocked with contaminants.
As an air conditioner using R410A incurs pressure higher than when using conventional refrigerant, it is necessary to choose adequate materials. Thicknesses of copper pipes used with R410A are as shown in the table. Never use copper pipes thinner than that in the table even when it is available on the market.

Thicknesses of Annealed Copper Pipes (R410A)

Pipe outside diameter	Thickness
6.35 mm (1/4 in.)	0.80 mm
9.52 mm (3/8 in)	0.80 mm
12.70 mm (1/2 in.)	0.80 mm
15.88 mm (5/8 in)	1.00 mm

For authorized service personnel only.

⚠ **WARNING**

① For the room air conditioner to operate satisfactorily, install it as outlined in this installation instruction sheet.

② Connect the indoor unit and outdoor unit with the room air conditioner piping and cords available standards 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 use an extension cord.

⑥ Do not turn on the power until all installation work is complete.

⚠ **CAUTION**

This installation instruction sheet describes how to install the indoor unit only.
To install the outdoor unit, refer to the installation instruction sheet included with the outdoor unit.

• Be careful not to scratch the room 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.

SELECTING THE MOUNTING POSITION

⚠ **WARNING**

Install at a place that can withstand the weight of the indoor and outdoor units and install positively so that the units will not topple or fall.

⚠ **CAUTION**

① Do not install where there is the danger of combustible gas leakage.

② Do not install near heat sources.

③ If children under 10 years old may approach the unit, take preventive measures so that they cannot reach the unit.

④ Take precautions to prevent the unit from falling.

Decide the mounting position with the customer as follows:

INDOOR UNIT
(1) Install the indoor unit level on a strong wall, floor, ceiling which is not subject to vibration.
(2) The inlet and outlet ports should not be obstructed : the air should be able to blow all over the room.
(3) Install the unit near an electric outlet or special branch circuit.
(4) Install the unit where connection to the outdoor unit is easy.
(5) Install the unit where the drain pipe can be easily installed.
(6) Take servicing, etc. into consideration and leave the spaces shown on the right. Also install the unit where the filter can be removed.
(7) Install the indoor unit where vibrations and noise are not amplified.
(8) When installing the unit on the floor, provide an opening that will allow sufficient air to reach the air inlet panel.
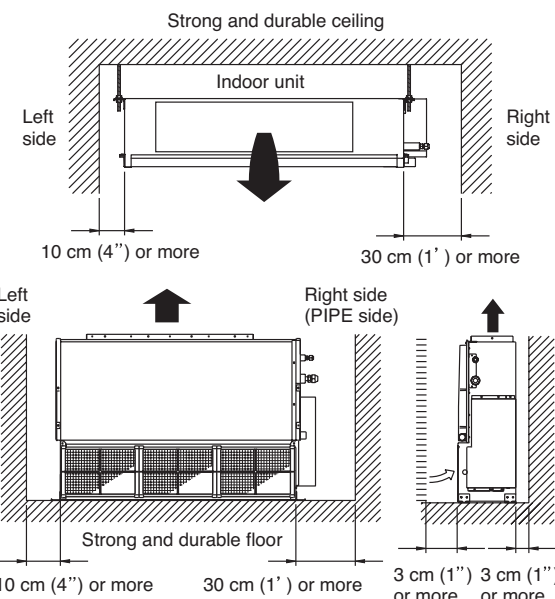
STANDARD PARTS
The following installation parts are furnished. Use them as required.

INDOOR UNIT ACCESSORIES

Name and Shape	Q'ty	Application
Installation template	1	For positioning the indoor unit
Hanger	4	For suspending the indoor unit from ceiling
Tapping screw (ø4 × 10)	8	For installing the hanger
Special nut A (large flange)	4	For suspending the indoor unit from ceiling
Special nut B (small flange)	4	

Name and Shape	Q'ty	Application
Coupler heat insulation (large)	1	For indoor side pipe joint (large pipe)
Coupler heat insulation (small)	1	For indoor side pipe joint (small pipe)
Binder	(Large) 4	For fixing the coupler heat insulation
Filter	2	9000 BTU/h model
	3	12000 - 22000 BTU/h models
Drain hose insulation	1	Insulates the drain hose and vinyl hose connection

CONNECTING PIPE REQUIREMENT

⚠ **CAUTION**

Refer to the installation instruction sheet of the outdoor unit for description of the length of connecting pipe or for difference of its elevation.

Diameter	Small	6.35 mm (1/4 in.)
	Large	12.70 mm (1/2 in.)

• Use pipe with water-resistant heat insulation.

⚠ **CAUTION**

Install heat insulation around both the gas and liquid pipes. Failure to do so may cause water leaks.
Use heat insulation with heat resistance above 120 °C. (Reverse cycle model only)
In addition, if the humidity level at the installation location of the refrigerant piping is expected to exceed 70%, install heat insulation around the refrigerant piping. If the expected humidity level is 70-80%, use heat insulation that is 15 mm or thicker and if the expected humidity exceeds 80%, use heat insulation that is 20 mm or thicker. If heat insulation is used that is not as thick as specified, condensation may form on the surface of the insulation. In addition, use heat insulation with heat conductivity of 0.045 W/(m·K) or less (at 20 °C).

ELECTRICAL REQUIREMENT

Connection cord (mm²)	
MAX.	MIN.
2.5	1.5

• Use conformed cord with Type 245 IEC57.
• Install all electrical works in accordance to the standard.
• Install the disconnect device with a contact gap of at least 3 mm in all poles nearby the units. (Both indoor unit and outdoor unit)

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 of 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.
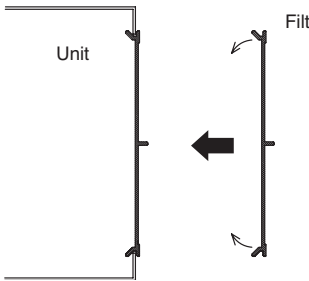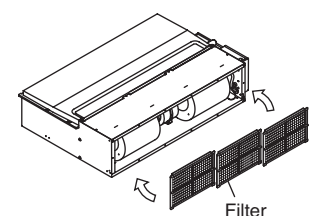
⚠ **CAUTION**

For installation, refer to the technical data.

A. CEILING CONCEALED TYPE
1. INSTALL THE FILTERS
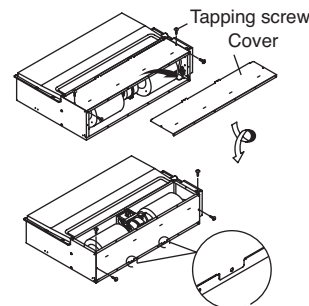• Install the filters to the unit.

This unit may also be installed with the air inlet facing down. See also **1** - B - 1 for such cases.

⚠ **CAUTION**

Fasten the unit securely with special nuts A and B.

B. FLOOR STANDING CONCEALED TYPE
1. INSTALL THE FILTERS
• Remove the 4 tapping screws, and then remove cover.
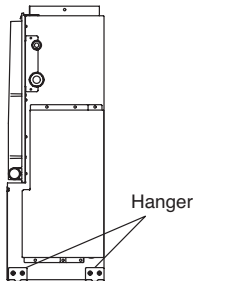• Install the cover with the 4 tapping screws as shown in the illustration below.

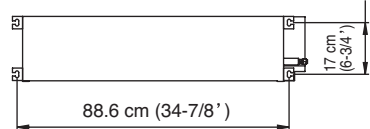• Install the filters to the unit referring to **1** - A -1.
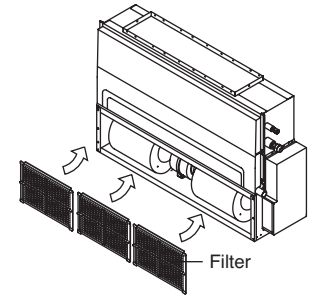
2. INSTALLING THE HANGERS
• Install the hangers to the unit (4 places).

3. DRILLING HOLES FOR BOLTS AND INSTALLING THE BOLTS
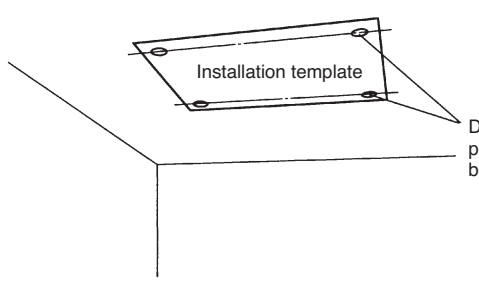• Drilling position for bolts.

88.6 cm (34-7/8′)

⚠ **CAUTION**

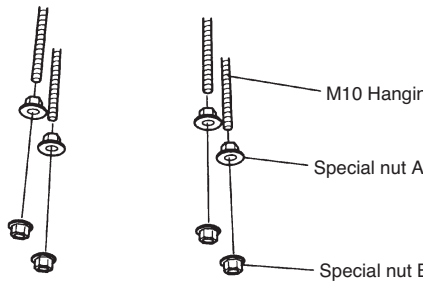Secure with an M10 anchor bolts. If securing the unit to the floor is difficult, first build a stand or platform.

2. DRILLING HOLES FOR BOLTS AND INSTALLING THE BOLTS
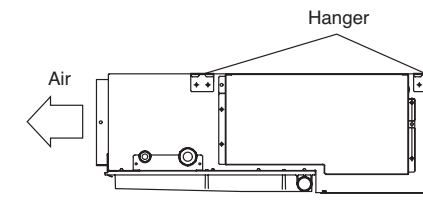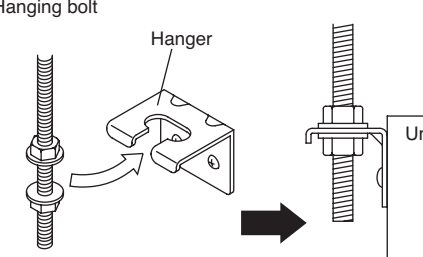• Using the installation template, drill holes for bolts (4 holes).

Installation template

Drilling position for bolts

3. INSTALLING THE HANGERS
• Fasten the hanging bolts to the ceiling and install special nuts A and B.

M10 Hanging bolt
Special nut A
Special nut B

• Install the hangers to the unit (4 places).

Hanger
Air
Hanger
Tapping screw

• Hang the unit.
Pass the hanging bolts through the hangers (4 places).

Hanging bolt
Hanger
Unit

M10
30 to 50 mm (1-3/16″ to 2-1/36″)

4. INSTALL THE UNIT
• Fix the unit.
Install the unit and fasten with special nut B.

Unit
Special nut B

5. LEVELING
Base horizontal and vertical direction leveling on top of the unit.

Level
Drain side

⚠ **CAUTION**

In order to prevent water from leaking around the outlet port, make sure to insulate it (on both the CEILING CONCEALED type and the FLOOR STANDING CONCEALED type).

NOTE: 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.

4. LEVELING
Base horizontal direction leveling on top of the unit.

Ceiling
Level
Drain side
⭕ OK ✖ NO
Level
Air
⭕ OK ✖ NO
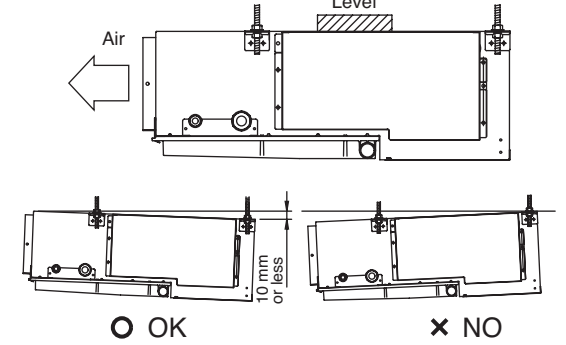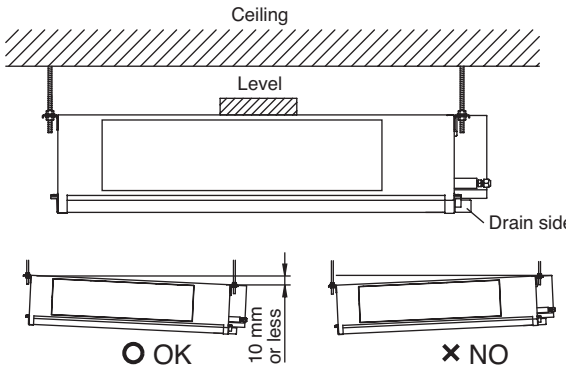
5. SERVICE HOLE DIMENSIONS
Open a service hole with the dimensions shown.

Service hole
Unit
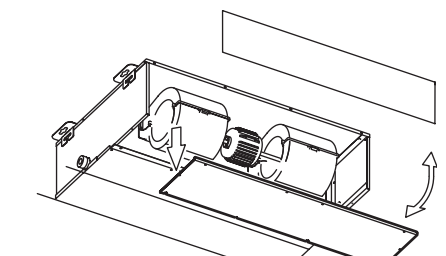Control box
30 cm (1′) or more
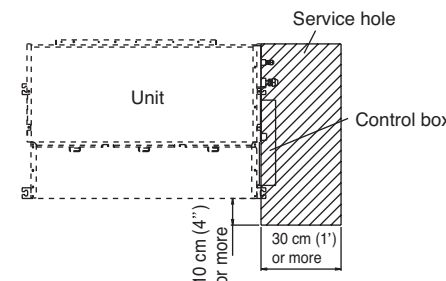
### 6. INTAKE DUCT CONNECTION
Follow the procedure in the following figure to the ducts.

811 mm
177 mm
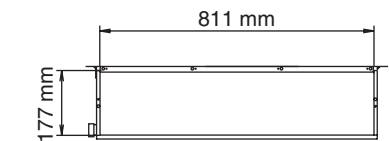
The air inlet duct can be changed by replacing the intake grille and flange.

INSTALL THE DRAIN HOSE
• Install the drain hose with downward gradient (1/50 to 2/50) and so there are no rises or traps in the hose.
• Use general hard polyvinyl chloride pipe 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.

A. CEILING CONCEALED TYPE

Outlet air flow
Drain hose
Trap
⭕ OK ✖ NO
Arrange the drain hose lower than this portion
✖ Rise
Supporter
1.5 to 2 m (5 to 6.5 ft)
✖ Air bleeding

B. FLOOR STANDING CONCEALED TYPE

⭕ OK ✖ NO ✖ NO
✖ Rise

⚠ **CAUTION**

① Install the drain hose so that the control box cover can be removed for servicing.

② In order to prevent water from leaking into the control box, make sure that the drain hose is well insulated.

③ After the wiring is connected and installation of the piping and drain hose is complete, make a seal around the opening in the wall.

The outside diameter of drain port is 26 mm, use a suitable drain hose.

Drain hose insulation
Drain hose insulation
Unit
0 mm Drain hose
Unit
Drain hose

For the bottom air intake, follow the procedure of ① → ② for installation.
(The factory setting is back air intake.)
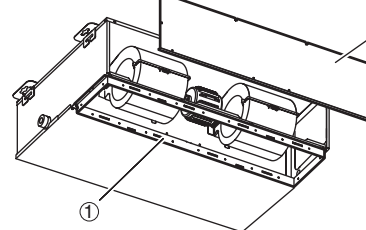
⚠ **CAUTION**

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 affect of the operating sound is small.

⚠ **CAUTION**

① If an intake duct is installed, take care not to damage the temperature sensor (the temperature sensor is attached to the intake port flange).

② Be sure to install the air inlet grille and the air outlet grille for air circulation. The correct temperature cannot be detected.

Unit
Air Outlet Grille   Air Inlet Grille (Room)
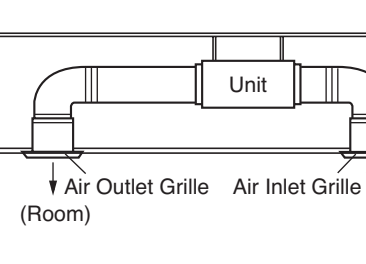
③ Grills must be fixed so that man cannot touch indoor unit fan, and cannot be removed by only hand operation without tool.

④ Be sure to install the air filter in the air inlet. If the air filter is not installed, the heat exchanger may be clogged and its performance may decrease.

2 ## CONNECTING THE PIPE

⚠ **CAUTION**

① Do not use mineral oil on flared part. Prevent mineral oil from getting into the system as this would reduce the lifetime of the units.

② While welding the pipes, be sure to blow dry nitrogen gas through them.

1. FLARING
(1) Cut the connection pipe to the necessary length with a pipe cutter.
(2) Hold the pipe downward so that cuttings will not enter the pipe and remove the burrs.
(3) Insert the flare nut (always use the flare nut attached to the indoor and outdoor units respectively) onto the pipe and perform the flare processing with a flare tool.
Use the special R410A flare tool, or the conventional flare tool.

Check if [L] is flared uniformly and is not cracked or scratched.

Die
A
Pipe
L
B
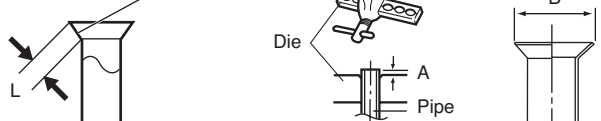
Pipe outside diameter	Dimension A (mm)
	Flare tool for R410A, clutch
6.35 mm (1/4 in.)	
9.52 mm (3/8 in.)	0 to 0.5
12.70 mm (1/2 in.)	

Pipe outside diameter	Dimension B $^{\,0}_{-0.4}$ (mm)
6.35 mm (1/4 in.)	9.1
9.52 mm (3/8 in.)	13.2
12.70 mm (1/2 in.)	16.6

When using conventional flare tools to flare R410A pipes, the dimension A should be approximately 0.5 mm more than indicated in the table (for flaring with R410A flare tools) to achieve the specified flaring. Use a thickness gauge to measure the dimension A.
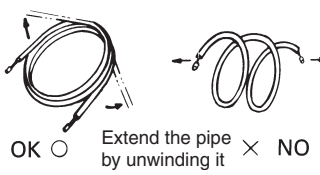
Width across flats

Pipe outside diameter	Width across flats of Flare nut
6.35 mm (1/4 in.)	17 mm
9.52 mm (3/8 in.)	22 mm
12.70 mm (1/2 in.)	26 mm

2. BENDING PIPES

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

OK ○ Extend the pipe by unwinding it   × NO

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.

When bending the pipe, do not bend it as is. The pipe will be collapsed. In this case, cut the heat insulating pipe with a sharp cutter as shown on the right, 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.

- Pipe
- Heat insulating Pipe
- Cutter
- Cut line
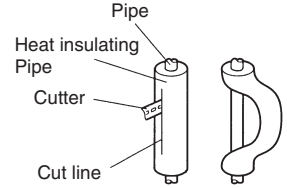
⚠ CAUTION

① **To prevent breaking of the pipe, avoid sharp bends.**
  Bend the pipe with a radius of curvature of 150 mm or over.

② **If the pipe is bent repeatedly at the same place, it will break.**

3. CONNECTION PIPES

Indoor unit
(1) Detach the caps and plugs from the pipes.

⚠ 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.**

(2) Centering the pipe against port on the indoor unit, turn the flare nut with your hand.
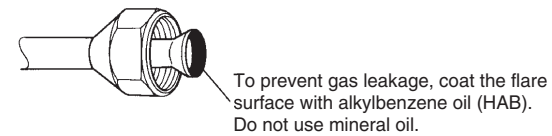
To prevent gas leakage, coat the flare surface with alkylbenzene oil (HAB). Do not use mineral oil.

(3) When the flare nut is tightened properly by your hand, use a torque wrench to finally tighten it.

- Holding spanner
- Body side
- 90°
- Torque wrench
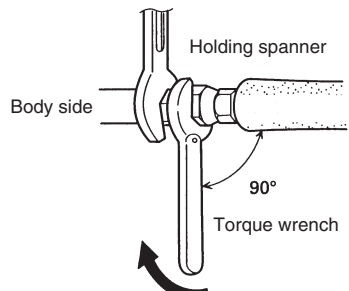
⚠ CAUTION

Hold the torque wrench at its grip, keeping it in the right angle with the pipe, in order to tighten the flare nut correctly.
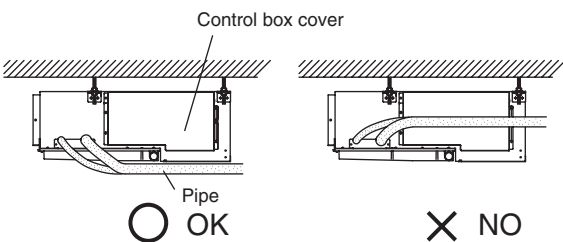
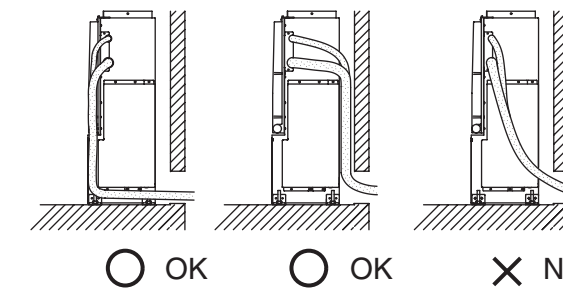| Flare nut	Tightening torque
6.35 mm (1/4 in.) dia.	14 to 18 N·m (140 to 180 kgf·cm)
12.70 mm (1/2 in.) dia.	50 to 62 N·m (500 to 620 kgf·cm)

⚠ CAUTION

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

- Lay the piping.

A. CEILING CONCEALED TYPE

Control box cover

○ OK Pipe   × NO

B. FLOOR STANDING CONCEALED TYPE

○ OK   ○ OK   × NO

⚠ CAUTION

① **Install the piping so that the control box cover can be removed for servicing.**

② **In order to prevent water from leaking into the control box, make sure that the piping is well insulated.**

---

3 INSTALLING THE COUPLER HEAT INSULATION

After checking for gas leaks, insulate by wrapping insulation around the two parts (gas and liquid) 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.

- Coupler heat insulation
- Body
- Be sure to overlap the insulation
- No gap
- Coupler heat insulation
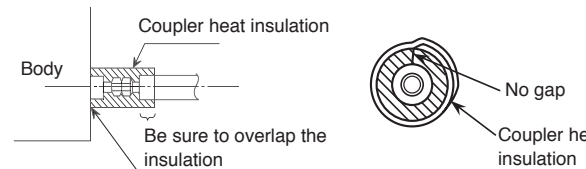
⚠ CAUTION

Must fit tightly against body without any gap.
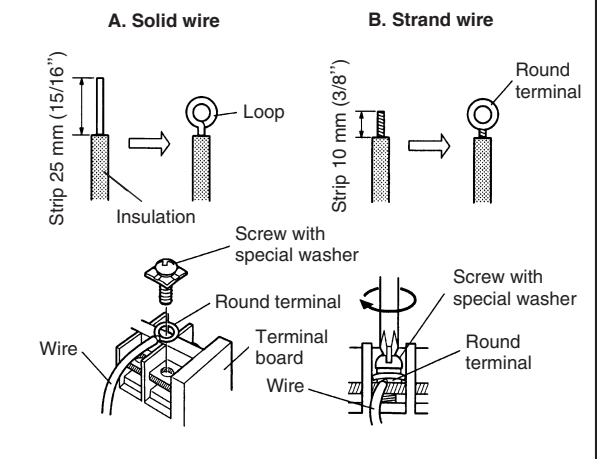
---

4 ELECTRICAL WIRING

HOW TO CONNECT WIRING TO THE TERMINALS

A. For solid core wiring
(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.
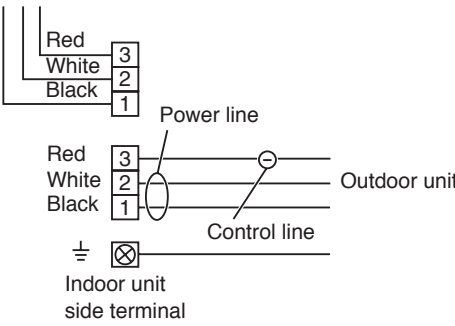
B. For strand wiring
(1) Cut the wire end with a wire cutter or wire-cutting pliers, then strip the insulation to about 10 mm (3/8") of expose the strand wiring.
(2) Using a screwdriver, remove the terminal screw(s) on the terminal board.
(3) Using a round terminal fastener or pliers, securely clamp a round terminal to each stripped wire end.
(4) Position the round terminal wire, and replace and tighten the terminal screw using a screwdriver.
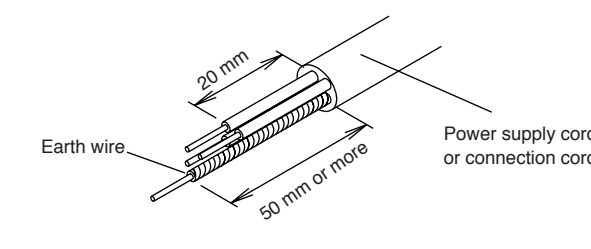
A. Solid wire
- Strip 25 mm (15/16")
- Loop
- Insulation
- Screw with special washer
- Round terminal
- Terminal board
- Wire
- Wire

B. Strand wire
- Round terminal
- Strip 10 mm (3/8")
- Screw with special washer
- Round terminal

---

1. CONNECTION DIAGRAMS

Remote controller

- Red / White / Black — 3 2 1
- Power line

- Red / White / Black — 3 2 1
- Outdoor unit
- Control line
- Indoor unit side terminal

2. CONNECTION CORD PREPARATION

Keep the earth wire longer than the other wires.

- Earth wire
- 20 mm
- 50 mm or more
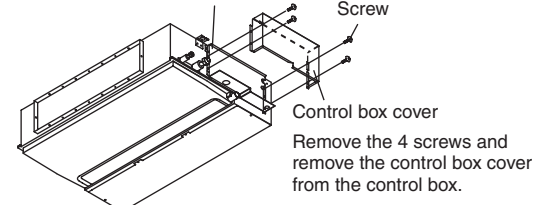- Power supply cord or connection cord

### 3. CONNECTION OF WIRING

⚠ WARNING

① **Before starting work, check that power is not being supplied to the indoor unit and outdoor unit.**

② **Match the terminal board numbers and connection cord colors with those of the outdoor unit.**
  Erroneous wiring may cause burning of the electric parts.

③ **Connect the connection cords 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.**

⑥ **Install the remote controller wires so as not to be direct touched with your hand.**

---

(1) Remove the control box cover and install each connection wire.

- Control box
- Screw
- Control box cover
- Remove the 4 screws and remove the control box cover from the control box.

(2) After wiring is complete, secure the remote controller cord, connection cord, and power cord with the cord clamps.

- 1 2 3   1 2 3
- Nylon clamp
- Cord clamp
- Connection cord
- Remote control cord
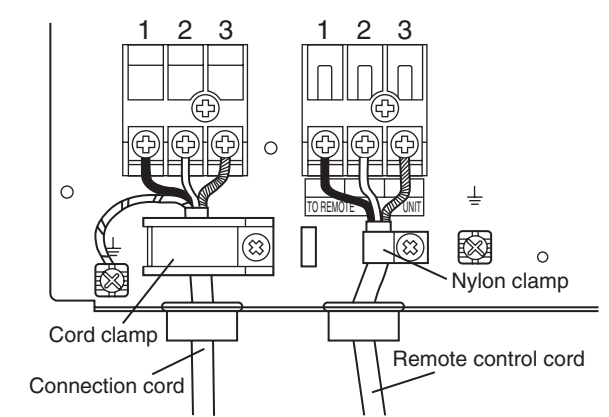
⚠ CAUTION

① **Tighten the indoor unit connection cord (to the outdoor unit) and power supply indoor and outdoor unit terminal board connections firmly with the terminal board screws. Faulty connection may cause a fire.**

② **If the indoor unit connection cord (to the outdoor unit) and power supply are wired incorrectly, the air conditioner may be damaged.**

③ **Wire the indoor unit connection cord (to the outdoor unit) by matching the numbers of the outdoor and indoor units terminal board numbers as shown in terminal label.**

④ **Ground both the indoor and outdoor units by attaching a ground wire.**

⑤ **Unit shall be grounded in compliance with the applicable local and national codes.**

---

5 FUNCTION SETTING

- Follow the instructions in the Local Setup Procedure, which is supplied with the remote control, in accordance with the installed condition. After the power is turned on, perform the Function Setting on the remote control.

- The settings may be selected between the following two: Function Number or Setting Value.

- Settings will not be changed if invalid numbers or setting values are selected.

Setting the Static Pressure

Setting Description	Function Number	Setting Value
Normal	21	00
High static pressure 1		01
High static pressure 2		02
High static pressure 3		03

Determine the wind volume in each mode i.e., applicable range of static pressure, refering to [7] STATIC PRESSURE CHARACTERISTICS. (The unit is factory-set to "00")

Setting the Cooler Room Temperature Correction
- Depending on the installed environment, the room temperature sensor may require a correction. The settings may be selected as shown in the table below. (The unit is factory-set to "00".)

Setting Description	Function Number	Setting Value
Standard	30	00
Lower control		01

Setting the Heater Room Temperature Correction
- Depending on the installed environment, the room temperature sensor may require a correction. The settings may be changed as shown in the table below. (The unit is factory-set to "00".)

Setting Description	Function Number	Setting Value
Standard	31	00
Lower control		01
Slightly warmer control		02
Warmer control		03

After completing the FUNCTION SETTING, be sure to turn off the power and turn it on again.

Setting Other Functions
- The following settings are also possible, depending on the operating conditions. (The unit is factory-set to "00".)

Auto Restart

Setting Description	Function Number	Setting Value
Yes	40	00
No		01

Indoor Room Temperature Sensor Switching Function (Wired remote controller only)

Setting Description	Function Number	Setting Value
No	42	00
Yes		01

- If setting value is "00", room temperature is controlled by the indoor unit temperature sensor.
- If setting value is "01", room temperature is controlled by either indoor unit temperature sensor or remote control unit sensor.

[When using the wireless remote controller]

SWITCHING REMOTE CONTROL UNIT SIGNAL CODES
- Confirm the setting of the remote control unit signal code and the printed circuit board setting.
  If these are not confirmed, the remote control unit cannot be used to operate for the air conditioner.

Jumper wire		Remote control unit signal code
JM1	JM2	
Connect	Connect	A (Primary setting)
Disconnect	Connect	b
Connect	Disconnect	c
Disconnect	Disconnect	d

Setting Record
- Record any changes to the settings in the following table.

| Setting	Setting Value
Static pressure	
Cooler room temperature correction	
Heater room temperature correction	
Auto restart	
Indoor room temperature sensor switching function	

---

6 TEST RUN

CHECK ITEMS
(1) Is operation of each button on the remote control unit normal?
(2) Does each lamp light normally?
(3) Do not air flow direction louvers operate normally?
(4) Is the drain normal?
(5) Is there any abnormal noise and vibration during operation?

- Do not operate the air conditioner in the running state for a long time.

[Using the wireless remote control]
- For the operation method, refer to the operating manual.
- The outdoor unit may not operate, depending on the room temperature. In this case, press the test run button on the remote control unit while the air conditioner is running. (Point the transmitter section of the remote control unit toward the air conditioner and press the test run button with the tip of a ball-point pen, etc.)

- Transmitter section
- Test run button
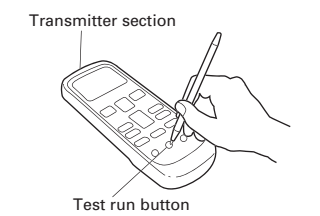
- To end test operation, press the remote control unit START/STOP button.
  (When the air conditioner is run by pressing the test run button, the OPERATION indicator lamp and TIMER indicator lamp will simultaneously flash slowly.)

[Using the wired remote control]
- For the operation method, refer to the operating manual.

(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.
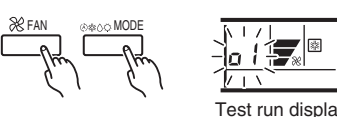
- Test run display

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

[Troubleshooting at the remote control LCD]
This is possible only on the wired remote control.

[SELF-DIAGNOSIS]
If an error occurs, the following display will be shown. ("EE" will appear in the set room temperature display.)

- Unit number
- Error code
- EX. Self-diagnosis
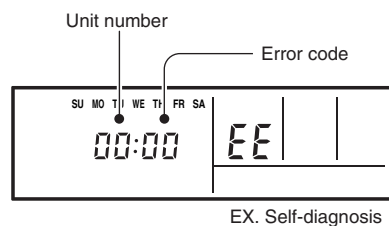
Error code	Error contents
01 13 26 27	Indoor signal error
00	Wired remote controller abnormal
02	Indoor room temperature sensor error
04	Indoor heat exchanger temperature sensor (middle) error
28	Indoor heat exchanger temperature sensor (inlet) error
09	Float switch operated
0C	Outdoor discharge pipe temperature sensor error
06	Outdoor heat exchanger temperature sensor (outlet) error
0A	Outdoor temperature sensor error
15	Compressor temperature sensor error
1d	2-way valve temperature sensor error
1E	3-way valve temperature sensor error
29	Outdoor heat exchanger temperature sensor (middle) error
20	Indoor manual auto switch abnormal
2A	Power supply frequency detection error
17	IPM protection
18	CT error
1A	Compressor location error
1b	Outdoor fan error
1F	Connected indoor unit abnormal
1c	Outdoor unit computer communication error
12	Indoor fan abnormal
0F	Discharge temperature error
24	Exessive high pressure protection on cooling
2c	4-way valve abnormal
16	Pressure switch abnormal
2b	Compressor temperature error
19	Active filter abnormal
25	PFC circuit error

If "CO" appears in the unit number display, there is a remote controller error. Refer to the installation instruction sheet included with the remote controller.

## 7 STATIC PRESSURE CHARACTERISTIC

⚠ CAUTION

If the applicable static pressure does not match the static pressure mode, the static pressure mode may be changed to another mode automatically.

RECOMMENDED RANGE OF EXTERNAL STATIC PRESSURE

0Pa to 90Pa

1. FAN PERFORMANCE AND AIR FLOW

EXTERNAL STATIC PRESSURE

- Mode ④ High
- Mode ③ High
- Mode ② High
- Mode ① High
- EXTERNAL STATIC PRESSURE (Pa)
- AIR FLOW (m³/h)
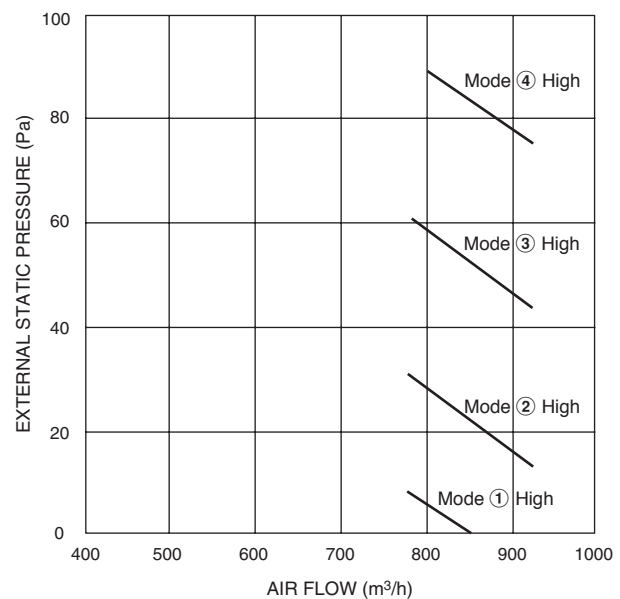
2. AIR FLOW SETTING
The air flow is set according to the FUNCTION settings in the following tables.

| Mode	Setting condition	Static pressure range
①	Normal	$0 \leq P \leq 8$
②	High static pressure 1	$13 \leq P \leq 31$
③	High static pressure 2	$44 \leq P \leq 62$
④	High static pressure 3	$76 \leq P \leq 90$

---

8 SPECIAL INSTALLATION METHODS

⚠ CAUTION

① **When setting DIP switches, do not touch any other parts on the circuit board directly with your bare hands.**

② **Be sure to turn off the main power.**

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

(1) Wiring method (indoor unit to remote controller)

- Indoor unit No. 0
- Indoor unit No. 1
- Indoor unit No. 2
- Indoor unit No. 3
- 1 2 3
- Remote controller
- Remote controller wire
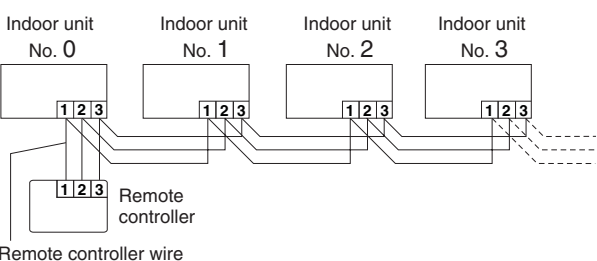
(2) DIP switch setting (Indoor unit)
  Set the unit number of each indoor unit using DIP switch on the indoor unit circuit board. (See following table and figure.)
  DIP switch is normally set to make unit number No. 0.

Indoor unit

Unit number	DIP SWITCH No.			
	1	2	3	4
0	OFF	OFF	OFF	OFF
1	ON	OFF	OFF	OFF
2	OFF	ON	OFF	OFF
3	ON	ON	OFF	OFF
4	OFF	OFF	ON	OFF
5	ON	OFF	ON	OFF
6	OFF	ON	ON	OFF
7	ON	ON	ON	OFF
8	OFF	OFF	OFF	ON
9	ON	OFF	OFF	ON
10	OFF	ON	OFF	ON
11	ON	ON	OFF	ON
12	OFF	OFF	ON	ON
13	ON	OFF	ON	ON
14	OFF	ON	ON	ON
15	ON	ON	ON	ON

Example : No. 3

- ON
- 1 2 3 4

---
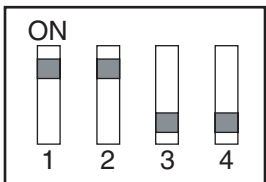
9 CUSTOMER GUIDANCE

Explain the following to the customer in accordance with the operating manual:

(1) Starting and stopping method, operation switching, temperature adjustment, timer, air flow switching, and other remote control unit operations.
(2) Air filter removal and cleaning, and how to use the air louvers.
(3) Give the operating and installation manuals to the customer.
(4) If the signal code is changed, explain to the customer how it change (the system returns to signal code A when the batteries in the remote control unit are replaced).
*(4) is applicable to using wireless remote control.