Refrigerant
R410A
Cassette Type
SPLIT TYPE AIR CONDITIONER
INSTALLATION INSTRUCTION SHEET
(PART NO. 9370937022)

IMPORTANT!
Please Read Before Starting
This air conditioning system meets strict safety and operating standards. As the installer or service person, it is an important part of your job to install or service the system so it operates safely and efficiently.

For safe installation and trouble-free operation, you must:
• Carefully read this instruction booklet before beginning.
• Follow each installation or repair step exactly as shown.
• Observe all local, state, and national electrical codes.
• Pay close attention to all danger, warning, and caution notices given in this manual.

WARNING: This symbol refers to a hazard or unsafe practice which can result in severe personal injury or death.
CAUTION: This symbol refers to a hazard or unsafe practice which can result in personal injury and the potential for product or property damage.

If Necessary, Get Help
These instructions are all you need for most installation sites and maintenance conditions. If you require help for a special problem, contact our sales/service outlet or your certified dealer for additional instructions.

In Case of Improper Installation
The manufacturer shall in no way be responsible for improper installation or maintenance service, including failure to follow the instructions in this document.

SPECIAL PRECAUTIONS

When Wiring
ELECTRICAL SHOCK CAN CAUSE SEVERE PERSONAL INJURY OR DEATH. ONLY A QUALIFIED, EXPERIENCED ELECTRICIAN SHOULD ATTEMPT TO WIRE THIS SYSTEM.

• Do not supply power to the unit until all wiring and tubing are completed or reconnected and checked.
• Highly dangerous electrical voltages are used in this system. Carefully refer to the wiring diagram and these instructions when wiring. Improper connections and inadequate grounding can cause accidental injury or death.
• Ground the unit following local electrical codes.
• Connect all wiring tightly. Loose wiring may cause overheating at connection points and a possible fire hazard.

When Transporting
Be careful when picking up and moving the indoor and outdoor units. Get a partner to help, and bend your knees when lifting to reduce strain on your back. Sharp edges or thin aluminum fins on the air conditioner can cut your fingers.

When Installing...
...In a Ceiling or Wall
Make sure the ceiling/wall is strong enough to hold the unit's weight. It may be necessary to construct a strong wood or metal frame to provide added support.

...In a Room
Properly insulate any tubing run inside a room to prevent "sweating" that can cause dripping and water damage to walls and floors.

...In Moist or Uneven Locations
Use a raised concrete pad or concrete blocks to provide a solid, level foundation for the outdoor unit. This prevents water damage and abnormal vibration.

...In an Area with High Winds
Securely anchor the outdoor unit down with bolts and a metal frame. Provide a suitable air baffle.

...In a Snowy Area (for Heat Pump-type Systems)
Install the outdoor unit on a raised platform that is higher than drifting snow. Provide snow vents.

When Connecting Refrigerant Tubing
• Keep all tubing runs as short as possible.
• Use the flare method for connecting tubing.
• Apply refrigerant lubricant to the matching surfaces of the flare and union tubes before connecting them, then tighten the nut with a torque wrench for a leak-free connection.
• Check carefully for leaks before starting the test run.

NOTE:
Depending on the system type, liquid and gas lines may be either narrow or wide. Therefore, to avoid confusion the refrigerant tubing for your particular model is specified as either “small” or “large” rather than as “liquid” or “gas”.

When Servicing
• Turn the power OFF at the main circuit breaker panel before opening the unit to check or repair electrical parts and wiring.
• Keep your fingers and clothing away from any moving parts.
• Clean up the site after you finish, remembering to check that no metal scraps or bits of wiring have been left inside the unit being serviced.
• After installation, explain correct operation to the customer, using the operating manual.
### STANDARD PARTS

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

#### INDOOR UNIT ACCESSORIES

<table>
<thead>
<tr>
<th>Name and Shape</th>
<th>Q’ty</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coupler heat insulation</td>
<td>2</td>
<td>For indoor side pipe joint</td>
</tr>
<tr>
<td>Special nut A (large flange)</td>
<td>4</td>
<td>For installing indoor unit</td>
</tr>
<tr>
<td>Special nut B (small flange)</td>
<td>4</td>
<td>For installing indoor unit</td>
</tr>
<tr>
<td>Template</td>
<td>1</td>
<td>For ceiling hole cutting</td>
</tr>
<tr>
<td>Blower cover insulation</td>
<td>2</td>
<td>For discharged air</td>
</tr>
<tr>
<td>Hook wire</td>
<td>2</td>
<td>For installing intake grille.</td>
</tr>
<tr>
<td>Binder (small)</td>
<td>1</td>
<td>For fixing the remote controller cord</td>
</tr>
<tr>
<td>Remote controller</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Tapping screw (flush heads)</td>
<td>2</td>
<td>For installing the remote controller</td>
</tr>
<tr>
<td>Remote controller cord</td>
<td>1</td>
<td>For connecting the remote controller</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Tool name</th>
<th>Contents of change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gauge manifold</td>
<td>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.</td>
</tr>
<tr>
<td>Charge hose</td>
<td>To increase pressure resistance, the hose material and base size were changed.</td>
</tr>
<tr>
<td>Vacuum pump</td>
<td>A conventional vacuum pump can be used by installing a vacuum pump adapter.</td>
</tr>
<tr>
<td>Gas leakage detector</td>
<td>Special gas leakage detector for HFC refrigerant R410A.</td>
</tr>
</tbody>
</table>

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/10 m. 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.

<table>
<thead>
<tr>
<th>Pipe outside diameter</th>
<th>Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.35 mm (1/4 in.)</td>
<td>0.80 mm (0.0315 in.)</td>
</tr>
<tr>
<td>9.52 mm (3/8 in.)</td>
<td>0.80 mm (0.0315 in.)</td>
</tr>
<tr>
<td>12.70 mm (1/2 in.)</td>
<td>0.80 mm (0.0315 in.)</td>
</tr>
<tr>
<td>15.88 mm (5/8 in.)</td>
<td>1.00 mm (0.0394 in.)</td>
</tr>
</tbody>
</table>

CAUTION

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

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 below.

<table>
<thead>
<tr>
<th>Discharge Direction</th>
<th>Piping Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>(4 directions)</td>
<td>100 mm (4&quot;) or more</td>
</tr>
<tr>
<td>(3 directions)</td>
<td>100 mm (4&quot;) or more</td>
</tr>
<tr>
<td>(2 directions)</td>
<td>100 mm (4&quot;) or more</td>
</tr>
</tbody>
</table>

**CAUTION**
Since 2-way outlet as shown below causes performance problems, do not set it.

INDOOR UNIT

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.
4. The ceiling rear height as shown in figure.
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.

**CONNECTION PIPE REQUIREMENT**

**GENERAL**

This INSTALLATION INSTRUCTION SHEET briefly outlines where and how to install the air conditioning system. Please read over the entire set of instructions for the indoor and outdoor units and make sure all accessory parts listed are with the system before beginning.

**TABLE**

<table>
<thead>
<tr>
<th>Model</th>
<th>Diameter (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14000, 18000 BTU/h model</td>
<td>6.35 mm (1/4 in.)</td>
</tr>
<tr>
<td>24000, 36000, 42000 BTU/h model</td>
<td>9.52 mm (3/8 in.)</td>
</tr>
<tr>
<td>12.70 mm (1/2 in.)</td>
<td>15.88 mm (5/8 in.)</td>
</tr>
</tbody>
</table>

- 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 248 °F. (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 (19/32") or thicker and if the expected humidity exceeds 80%, use heat insulation that is 20 mm (3/4") 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 68 °F).

**ELECTRICAL REQUIREMENT**

- Electric wire size:

<table>
<thead>
<tr>
<th>Connection cord (mm²)</th>
<th>MAX.</th>
<th>MIN.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.5</td>
<td>1.5</td>
</tr>
</tbody>
</table>

- Install all electrical works in accordance to the standard.
- Install the disconnect device with a contact gap of at least 3 mm (1/8") in all poles nearby the units. (Both indoor unit and outdoor unit)
- Install the circuit breaker nearby the units.
INSTALLATION PROCEDURE
Install the air conditioner as follows:

1 INDOOR UNIT INSTALLATION

WARNING
- 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.
- 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.

REMOVING THE PANEL FRAME
- Pull up the corner sections (A) of the panel frame as shown in figure (4 locations).
- Pull up in the direction of the arrow while holding down the C section of figure (4 locations).
1. POSITION THE CEILING HOLE AND HANGING BOLTS

- 940 mm (37")
- 890 mm (35-3/64")
- 750 mm (29-17/32")
- 750 mm (29-17/32")
- 30 mm (1-3/16") or more
- 30 mm (1-3/16") or more
- 30 mm (1-3/16") or more
- 235 mm (9-1/4") (18 to 24 type)
- 285 mm (11-7/32") (30 to 54 type)
- 200 mm (7-7/8") (18 to 24 type)
- 250 mm (9-27/32") (30 to 54 type)

2. HANGING PREPARATIONS

- Firmly fasten the hanging bolts as shown in figure 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.

3. BODY INSTALLATION

As for the dimension of the ceiling rear height is above figure or more.

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

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

**WARNING**

Perform final tightening by tightening the double nut firmly.

- *Must fit tightly against ceiling without any gap.

**CAUTION**

Always remove the panel frame after removing the intake grille.

**INSTALLING THE PANEL FRAME**

- 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.

(A) Standard setting   (B) Slender setting

**Appearance of slender setting**

* Allowable space between the unit and the ceiling 5 mm (3/16") or less
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, rise 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.

3 CONNECTING THE PIPING

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.

Pipe outside diameter | Dimension A Flare tool for R410A, clutch type
--- | ---
6.35 mm (1/4 in.) | 0 to 0.5 mm (0 to 0.0197 in.)
9.52 mm (3/8 in.) | 10 to 0.5 mm (0.3583 in.)
12.70 mm (1/2 in.) | 13.2 mm (0.5197 in.)
15.88 mm (5/8 in.) | 16.6 mm (0.6536 in.)

When using conventional flare tools to flare R410A pipes, the dimension A should be approximately 0.5 mm (1/32") 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.

Air bleeding 150 mm (6") or less

Max. 800 mm (31")

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 bend 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.

CAUTION
① To prevent breaking of the pipe, avoid sharp bends. Bend the pipe with a radius of curvature of 150 mm (6") 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.

Do not remove the cap from the connection pipe before connecting the pipe.

**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.

<table>
<thead>
<tr>
<th>Flare nut</th>
<th>Tightening torque</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.35 mm (1/4 in.) dia.</td>
<td>16 to 18 N·m (160 to 180 kgf·cm)</td>
</tr>
<tr>
<td>9.52 mm (3/8 in.) dia.</td>
<td>30 to 42 N·m (300 to 420 kgf·cm)</td>
</tr>
<tr>
<td>12.70 mm (1/2 in.) dia.</td>
<td>49 to 61 N·m (490 to 610 kgf·cm)</td>
</tr>
<tr>
<td>15.88 mm (5/8 in.) dia.</td>
<td>63 to 75 N·m (630 to 750 kgf·cm)</td>
</tr>
</tbody>
</table>

Do not remove the cap from the connection pipe before connecting the pipe.

**CAUTION**

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

**CAUTION**

Must fit tightly against body without any gap.

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.
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.

1. WIRING SYSTEM DIAGRAM

2. INDOOR UNIT SIDE

WARNING
① Be sure to refer the above diagram and do correct field wiring. Wrong wiring causes malfunction of the unit.
② Check local electrical codes and also any specific wiring instructions or limitation.

Ceiling height setting
Set the DIP switch for the ceiling height according to the table below.

<table>
<thead>
<tr>
<th>Ceiling height</th>
<th>DIP-SW4</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5 - 3.0 m (8.2-9.8 ft)</td>
<td>1 2 3</td>
</tr>
<tr>
<td>3.0 - 3.5 m (9.8-11.5 ft)</td>
<td>1 ON OFF</td>
</tr>
<tr>
<td>More than 3.5 m (More than 11.5 ft)</td>
<td>1 OFF ON</td>
</tr>
<tr>
<td>Less than 2.5 m (Less than 8.2 ft)</td>
<td>1 ON ON</td>
</tr>
</tbody>
</table>

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.
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 figure. At this time, use the piping position as the criteria.

INSTALLING THE INTAKE GRILLE

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

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

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

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

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

CAUTION

Install the intake grille hook wire to the grille assembly. If it falls, it may cause injuries.
1. 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. 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. 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 1 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

The room temperature is detected by the remote controller temperature sensor.

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.

CAUTION

1. 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.

2. 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.

3. Do not touch the remote controller PC board and PC board parts directly with your hands.

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.
TEST RUN

(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.

**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 \[\wedge/\vee\] simultaneously for 5 seconds or more to start the self-diagnosis.
   Refer to the following tables for the description of each error code.

![Ex. Self-diagnosis]

(3) Press the set temperature buttons \[\wedge/\vee\] simultaneously for 5 seconds or more to stop the self-diagnosis.

<table>
<thead>
<tr>
<th>Error code</th>
<th>Error contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Communication error (indoor unit ← remote controller)</td>
</tr>
<tr>
<td>01</td>
<td>Communication error (indoor unit ← outdoor unit)</td>
</tr>
<tr>
<td>02</td>
<td>Room temperature sensor open</td>
</tr>
<tr>
<td>03</td>
<td>Room temperature sensor short-circuited</td>
</tr>
<tr>
<td>04</td>
<td>Indoor heat exchanger temperature sensor open</td>
</tr>
<tr>
<td>05</td>
<td>Indoor heat exchanger temperature sensor short-circuited</td>
</tr>
<tr>
<td>06</td>
<td>Outdoor heat exchanger temperature sensor</td>
</tr>
<tr>
<td>08</td>
<td>Power source connection error</td>
</tr>
<tr>
<td>09</td>
<td>Float switch operated</td>
</tr>
<tr>
<td>0A</td>
<td>Outdoor temperature sensor</td>
</tr>
<tr>
<td>0C</td>
<td>Discharge pipe temperature sensor</td>
</tr>
<tr>
<td>11</td>
<td>Model abnormal</td>
</tr>
<tr>
<td>12</td>
<td>Indoor fan abnormal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Error code</th>
<th>Error contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Outdoor signal abnormal</td>
</tr>
<tr>
<td>14</td>
<td>Excessive outdoor pressure (permanent stop)</td>
</tr>
<tr>
<td>15</td>
<td>Compressor temperature sensor</td>
</tr>
<tr>
<td>16</td>
<td>Pressure switch error</td>
</tr>
<tr>
<td>17</td>
<td>IPM error</td>
</tr>
<tr>
<td>18</td>
<td>CT error</td>
</tr>
<tr>
<td>19</td>
<td>Active filter module (AFM) error</td>
</tr>
<tr>
<td>1A</td>
<td>Compressor does not operate</td>
</tr>
<tr>
<td>1B</td>
<td>Outdoor unit fan error</td>
</tr>
<tr>
<td>1C</td>
<td>Communication error (inverter ← multicontroller)</td>
</tr>
<tr>
<td>1D</td>
<td>2 way valve sensor error</td>
</tr>
<tr>
<td>1E</td>
<td>Expansion valve error</td>
</tr>
<tr>
<td>1F</td>
<td>Connection indoor unit error</td>
</tr>
</tbody>
</table>

2. CHECKING DRAINAGE

To check the drain, remove the water cover and fill with 2 to 3 l of water as shown in figure.

The drain pump operates when operating in the cooling mode.

![Drainage check diagram]
1. 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

2. Rotary switch setting (indoor unit)
   - Set the unit number of each indoor unit using the rotary switch on the indoor unit circuit board. The rotary switch is normally set to 0.

3. DIP switch setting (remote controller)
   - Change DIP switch 1 No. 3 on the remote controller from OFF to ON.

2. DUAL REMOTE CONTROLLERS (OPTIONAL)

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

1. Wiring method (indoor unit to remote controller)

2. DIP switch setting (remote controller)
   - Set the remote controller DIP switch 1 No. 1 and 2 according to the following table.

3. AUTO RESTART

- When the air conditioner power was temporarily turned off by a power failure etc., it restarts automatically after the power recovers. (Operated by setting before the power failure)
- The auto restart function can be canceled.

4. DIP-SWITCH SETTING

- Indoor unit
  - DIP-Switch 1
    - OFF: Auto restart setting
    - ON: Temperature correction setting
  - DIP-Switch 4
    - OFF: Remote controller setting
    - ON: Air flow setting

- Remote controller
  - DIP-Switch 1
    - OFF: Dual remote controller setting
    - ON: Group control setting
  - DIP-switch 2
    - OFF: Multiple units
    - ON: One unit
  - DIP-switch 3
    - OFF: Casing only
    - ON: Heat & cool model
  - DIP-switch 4
    - OFF: Invalidity
    - ON: Validity
  - DIP-switch 5
    - OFF: Fixed at OFF
    - ON: Fixed at ON
  - DIP-switch 6
    - OFF: Cannot be used
    - ON: Cannot be used

10. OPENING THE DUCT

- CONNECTION HOLE

- Cut off the parts (Cabinet) indicated by the arrow in the figure with nippers, needle nose pliers, etc.
- 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.

- OPENING THE DUCT

- CONNECTION HOLE

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