WESTERN™
AIRCONDITIONING

QUALITY ASSURED FIRM ISO 9001 MERT CERT BSI
MSZ EN ISO 9001:2001

USER AND INSTALLATION MANUAL

Cassette Type Air Conditioner

MODEL

SCVH12A-A1NA(I)	***SCVH36A-E1NA(I)***
SCVH18A-A1NA(I)	***SCVH42A-E1NA(I)***
SCVH24A-A1NA(I)	***SCVH48A-E1NA(I)***
SCVH36A-A1NA(I)	***SCVH60A-E1NA(I)***

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This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

Safety Precautions

WARNING! This mark indicates procedures which, if improperly performed, might lead to the death or serious injury of the user.

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

WARNING!

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

Installation should be left to the dealer or another professional. Improper installation may cause water leakage, electrical shock, or fire.

Install the air conditioner according to the instructions given in this manual. Incomplete installation may cause water leakage, electrical shock, or fire.

Be sure to use the supplied or specified installation parts. Use of other parts may cause the unit to come to lose, water leakage, electrical shock, or fire.

Install the air conditioner on a solid base that can support the weight of the unit. An inadequate base or incomplete installation may cause injury in the event the unit falls off the base.

Electrical work should be carried out in accordance with the installation manual and the national electrical wiring rules or code of practice. Insufficient capacity or incomplete electrical work may cause electrical shock or fire.

The appliance shall be installed in accordance with national wiring regulations

Safety Precautions

Be sure to use a dedicated power circuit. Never use a power supply shared by another appliance.

For wiring, use a cable length enough to cover the entire distance with no connection. Do not use an extension cord. Do not put other loads on the power supply, use a dedicated power circuit. (Failure to do so may cause abnormal heat, electric shock or fire.)

Use the specified types of wires for electrical connections between the indoor and outdoor units. Firmly clamp the interconnecting wires so their terminals receive no external stresses. Incomplete connections or clamping may cause terminal overheating or fire.

After connecting interconnecting and supply wiring be sure to shape the cables so that they do not put undue force on the electrical covers or panels. Install covers over the wires. Incomplete cover installation may cause terminal overheating, electrical shock, or fire.

If any refrigerant has leaked out during the installation work, ventilate the room. (The refrigerant produces a toxic gas if exposed to flames.)

After all installation is complete, check to make sure that no refrigerant is leaking out. (The refrigerant produces a toxic gas if exposed to flames.)

When installing or relocating the system, be sure to keep the refrigerant circuit free from substances other than the specified refrigerant (R410A), such as air. (Any presence of air or other foreign substance in the refrigerant circuit causes an abnormal pressure rise or rupture, resulting in injury.)

During pump-down, stop the compressor before removing the refrigerant piping. If the compressor is still running and the stop valve is open during pump-down, air will be sucked in when the refrigerant piping is removed, causing abnormal pressure in the freezer cycle which will lead to breakage and even injury.

Safety Precautions

During installation, attach the refrigerant piping securely before running the compressor. If the compressor is not attached and the stop valve is open during pump-down, air will be sucked in when the compressor is run, causing abnormal pressure in the freezer cycle which will lead to breakage and even injury.

Be sure to establish an earth. Do not earth the unit to a utility pipe, arrester, or telephone earth. Incomplete earth may cause electrical shock, or fire. A high surge current from lightning or other sources may cause damage to the air conditioner.

Be sure to install an earth leakage breaker. Failure to install an earth leakage breaker may result in electric shocks, or fire.

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

⚠ CAUTION!

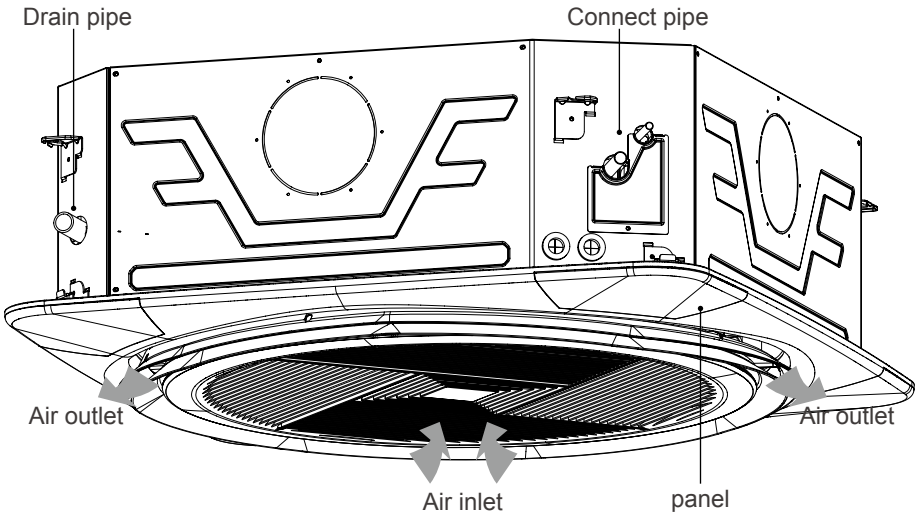
Do not install the air conditioner in a place where there is danger of exposure to inflammable gas leakage. If the gas leaks and builds up around the unit, it may catch fire.

Establish drain piping according to the instructions of this manual. Inadequate piping may cause flooding.

Tighten the flare nut according to the specified method such as with a torque wrench. If the flare nut is tightened too hard, the flare nut may crack after a long time and cause refrigerant leakage.

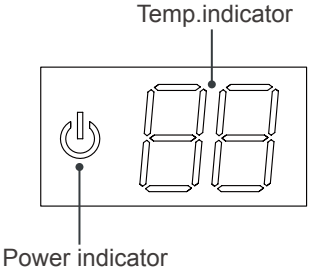
Outline of the Unit and Main Parts

Indoor



Remote controller

Display



NOTE

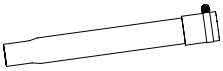
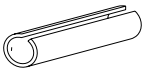
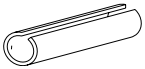
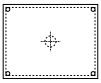
- The connection pipe and duct for this unit should be prepared by the user.
- The unit is standard equipped with rectangular duct.

Preparative for Installation

Standard Accessory Parts

The standard accessory parts listed below are furnished and should be used as required.

Table 1

	Name	Appearance	Q'ty	Usage
Indoor Unit	Remote controller		1	To control the indoor uint
	Drain pipe		1	To connect with the hard PVC drain pipe
	Nut		2	To connect the pipe
	Nut		4	To install the indoor unit
	Insulation		1	To insulate the gas pipe
	Insulation		1	To insulate the liquid pipe
	Fastener		4	To fasten the sponge
	Installation paperboard		1	used for ceiling drilling
	Screw		4	To fix the installation paperboard
	Others	Instructions、bar code		

Preparative for Installation

Selection of the Installation Location

WARNING!

The unit must be installed where strong enough to withstand the weight of the unit and fixed securely, otherwise the unit would topple or fall off.

CAUTION!

- Do not install where there is a danger of combustible gas leakage.
- Do not install the unit near heat source, steam, or flammable gas.
- Children under 10 years old must be supervised not to operate the unit.

Decide the installation location with the customer as follows:

Indoor Unit

1. Obstruct should be put away from the intake or outlet vent of the indoor unit so that the airflow can be blown through all the room.
2. Make sure that the installation meets the requirement of the schematic diagram of installation spaces.
3. Select the place where can stand 4 times of the weight of the indoor unit and would not increase the operating noise and vibration.
4. The horizontality of the installation place should be guaranteed.
5. Select the place where is easy to drain out the condensate water, and connect with outdoor unit.
6. Make sure that there are enough space for care and maintenance, and the height fall between the indoor unit and ground is above 2300mm.
7. When installing the suspension bolt, check if the installation place can stand 4 times of the weight of the unit. If not, reinforce it before installation.

Note:

There will be large amount of greasy dirt accumulated on the fan, heat exchanger and water pump located in the dinning room and kitchen, which would reduce the capacity of the heater exchanger, lead to leakage and abnormal operation of the water pump.

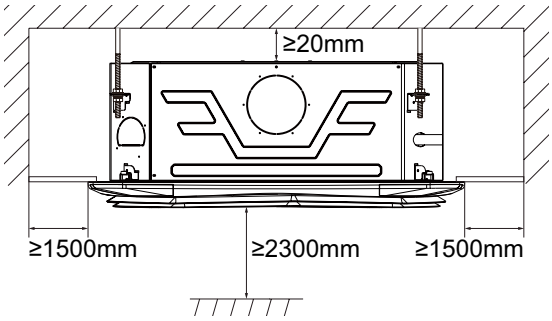


Fig.1

Installation of the Unit

Installation of the Indoor Unit

1. Indoor unit dimension

WARNING!

- Install the indoor unit 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.
- If the job is done with the panel frame only, there is a risk that the unit will come loose. Please take care.

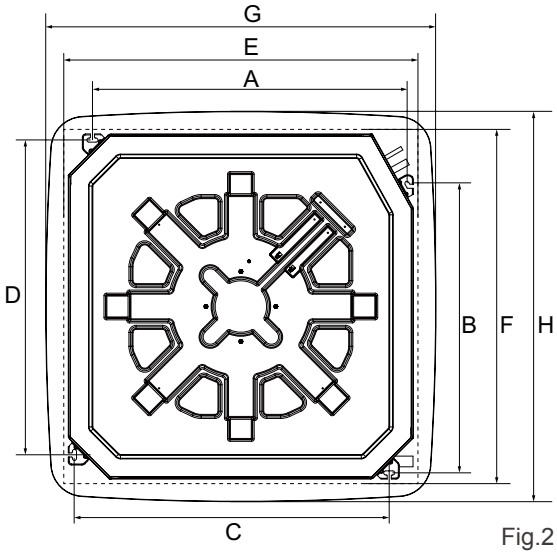


Fig.2

Table 2 Units: mm

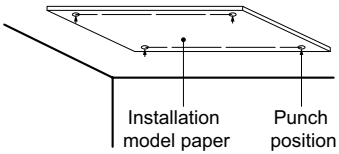
Installation Dimension				The Ceiling Dimension		Panel Dimentsion	
A	B	C	D	E	F	G	H
769	698	766	766	900	900	950	950

Installation of the Unit

2. Installing the Main Body Unit

● Installation of the unit with old ceiling (The ceiling must be level.)

1. Please punching holes in the ceiling with the instruction on the installation model paper.
   Notice:
   (1) Holes in the ceiling must has the same center with the air conditioning main body.
   (2) Before installation, please complete all pipes and wires connection to the indoor machine.
   (3) To maintain the ceiling level and prevent vibration, please strengthen the intensity of the ceiling if necessary.
2. Fit boom on the ceiling according to the hole position on the installation model paper.
   (1) Punch 4 holes in the hole position after putting the installation model paper on the ceiling as the picture shows. The diameter of holes refers to the expansion bolt's, and it's 60mm to 70mm depth.



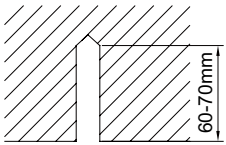
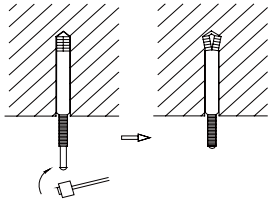


Fig.3



   (2) Insert the expansion bolts into the hole until it is reliable, then fit the lifting screw into the expansion bolt.
   Notice: Please adjust the length of the lifting screw according to the height of the ceiling when installation.

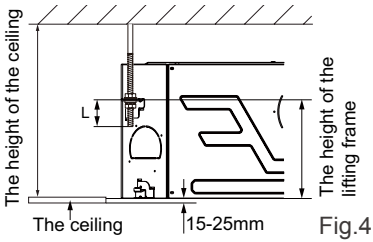
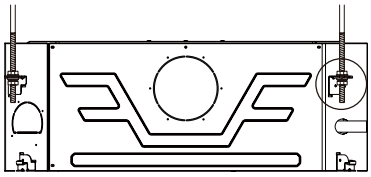


Fig.4

   The length of the lifting screw = The height of the ceiling - The height of the lifting frame + L (the remaining length L usually is 1/2 the length of the lifting screw.)

3. Installing the air conditioner main body
   (1) Fit the air conditioner main body on the lifting screw with the special nuts.
   (2) Adjust the position of the main body, ensure the ceiling edges evenly spaced and the underside of the main body is recessed the ceiling 15 to 25 mm.



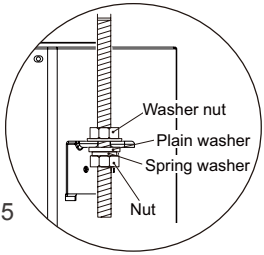


Fig.5

Installation of the Unit

4. Ensure the air conditioner is level
   Ensure the four angles of the unit are level one by one with a spirit level.
   (If products tilt the fixed pump to the opposite direction, float switch failure may occur, resulting in drop of water.)

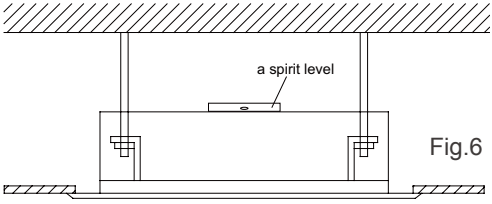
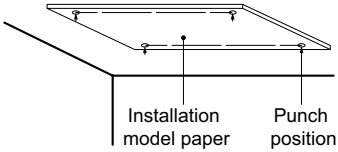


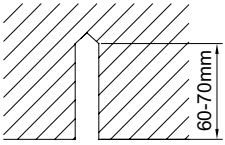
Fig.6

5. Ensure the air conditioner is level and fit the air conditioner main body by fastening nuts to the lifting screws.

● Installation of the unit with the new ceiling

1. Fit boom on the ceiling according to the hole position on the installation model paper. (Bolts can be pre-embedded in the new ceiling, if it can bear the weight of the indoor machine when the concrete shrinks.)
   (1) Punch 4 holes in the hole position after putting the installation model paper on the ceiling. The diameter of holes refer to the expansion bolt's, and it's 60mm to 70mm depth.





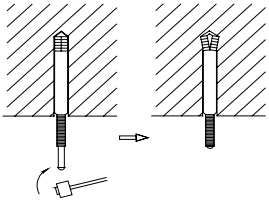
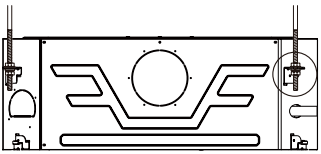


Fig.7

   (2) Insert the expansion bolts into the hole until it is reliable, then fit the lifting screw into the expansion bolt.

2. Installing the air conditioner main body
   (1) Fit the air conditioner main body on the lifting screw with the special nuts.
   (2) Predetermine the opening size and location on the ceiling for the installation of the air conditioner main body by fixing the installation model paper on the air conditioner main body with screws.



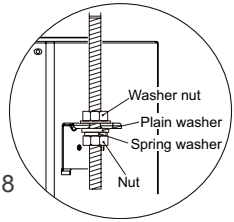


Fig.8

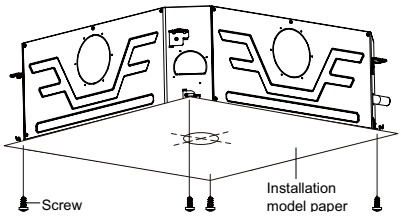


Fig.9

Installation of the Unit

3. Remove the installation model paper after ceiling installation.

4. Adjustment
   Adjust the position of the main body, ensure the ceiling edges evenly spaced and the underside of the main body is recessed the ceiling 5 to 25 mm.
   (If products tilt the fixed pump to the opposite direction, float switch failure may occur, resulting in drop of water.)

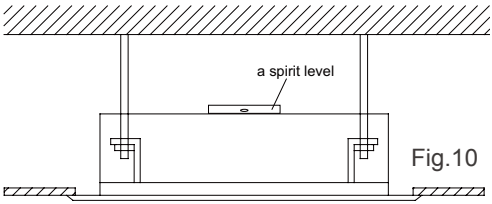


Fig.10

5. Ensure the air conditioner is level and fit the air conditioner main body by fastening nuts to the lifting screws.

Installation of the Connection Pipe

1. Flare Processing

(1). Cut the connection pipe with the pipe cutter and remove the burrs.
(2). Hold the pipe downward to prevent cuttings from entering the pipe.
(3). Remove the flare nuts at the stop valve of the outdoor unit and inside the accessory bag of the indoor unit, then insert them to the connection pipe, after that, flare the connection pipe with a flaring tool.
(4). Check if the flare part is spread evenly and there are no cracks (see Fig.11).

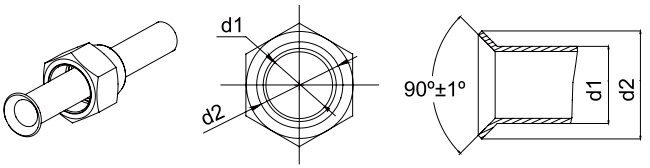


Fig.11

2. Bending Pipes

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

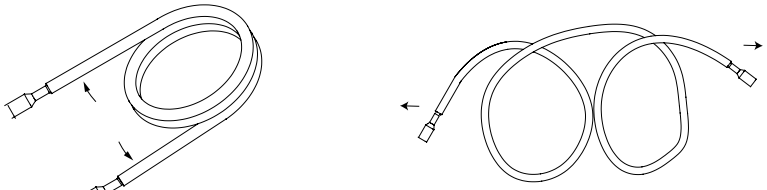

Extend the pipe by unwinding it

Fig.12

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

(3). 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.

(4). 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 in Fig.13, and bend it after exposing the pipe. After bending the pipe as you want, be sure to put the heat insulating pipe back on the pipe, and secure it with tape.

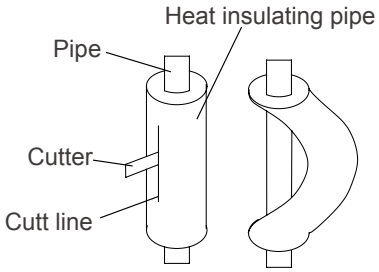


Fig.13

CAUTION!

- To prevent breaking of the pipe, avoid sharp bends. Bend the pipe with a radius of curvature of 150 mm or over.
- If the pipe is bent repeatedly at the same place, it will break.

3. Connecting the Pipe at the Indoor Unit Side

Detach the caps and plugs from the pipes.

CAUTION!

- 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.
- Do not remove the flare nut until the connection pipe is to be connected so as to prevent dust and impurities from coming into the pipe system.

Centering the pipe against port on the indoor unit, turn the flare nut with your hand.

CAUTION!

Hold the torque wrench at its grip, keeping it in the right angle with the pipe as shown in Fig.14, in order to tighten the flare nut correctly.

Installation of the Unit

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

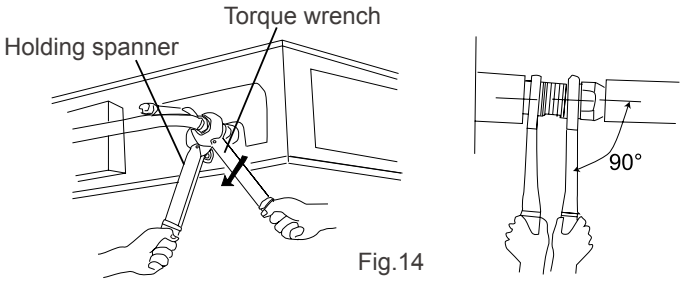
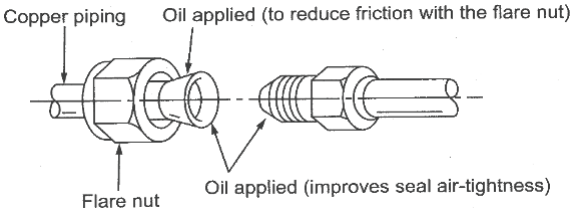


Fig.14



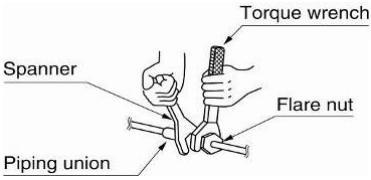


Fig.15

Table 3 Flare nut tightening torque

Pipe Diameter (Inch)	1/4″	3/8″	5/8″	1/2″	3/4″	7/8″
Tightening Torque (N·m)	15-30	35-40	60-65	45-50	70-75	80-85

CAUTION!

Be sure to connect the gas pipe after connecting the liquid pipe completely.

4. Heat Insulation on the Pipe Joints (Indoor Side Only)

Stick coupler heat insulation (large and small) to the place where connecting pipes.

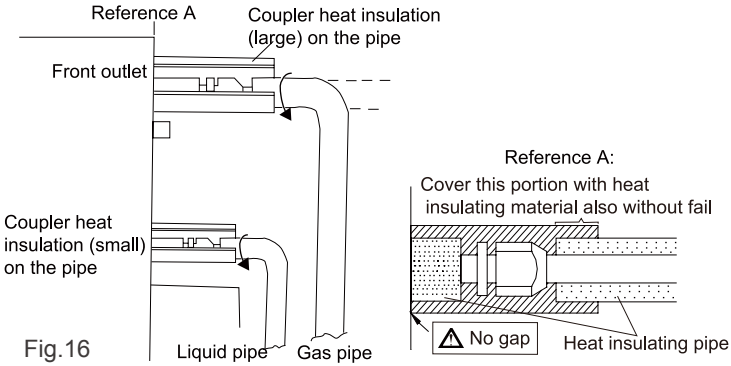


Fig.16

Installation of the Unit

Installation of the Drain Hose

● Installation of Drain Piping

CAUTION!

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

1. Keep piping as short as possible and slope it downwards at a gradient of at least 1/100 so that air may not remain trapped inside the pipe.
2. Keep pipe size equal to or greater than that of the connecting pipe.
3. Install the drain piping as shown and take measures against condensation. Improperly rigged piping could lead to leaks and eventually wet furniture and belongings.

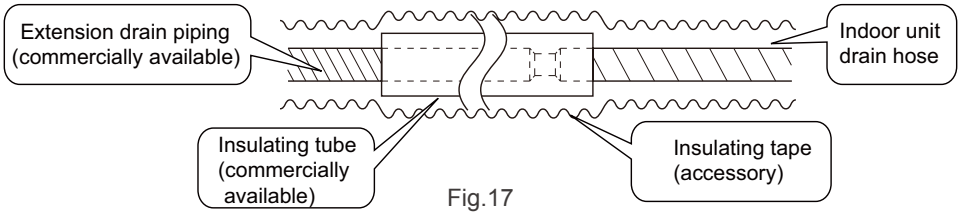
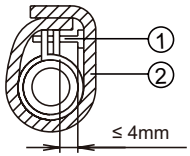
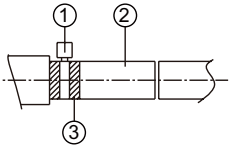


Fig.17

● Installing the Drain Pipes

1. Insert the drain pipe to the drain outlet of the unit and then tighten the clamp securely with tape.
2. Connect the extension drain pipe to the drain pipe and then tighten the clamp with tape.

 Fig.18	 Fig.19
Tighten the clamp until the screw head is less then 4mm from the hose. Metal clamp Drain hose (accessory) Grey tape (accessory)	Insulate the pipe clamp and the drain hose using heat insulation sponge. Metal clamp (accessory) Insulation sponge (accessory)

Installation of the Unit

3. When unifying multiple drain pipes, install the pipes as Fig.20. Select converging drain pipes whose gauge is suitable for the operating capacity of the unit.(take the cassette type unit for example)

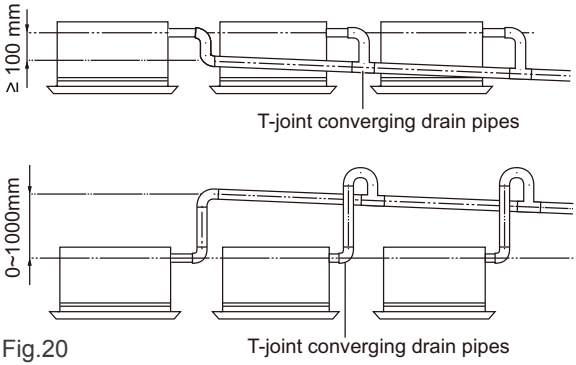


Fig.20

4. When the drain hose cannot keep a sufficient gradient, it is necessary to fit a riser pipe (field supplied) to it.
5. If the air flow of indoor unit is high, this might cause negative pressure and result in return suction of outdoor air. Therefore, U-type water trap shall be designed on the drainage side of each indoor unit.(Fig.21)
6. Install one water trap for each unit.
7. Installation of water trap shall consider easy cleaning in the future.

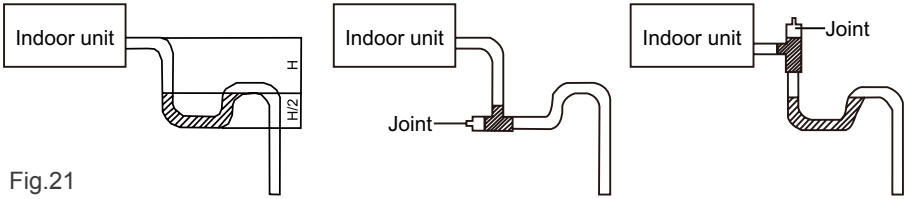


Fig.21

8. Connection of drainage branch pipe to the stand pipe or horizontal pipe of drainage main pipe

The horizontal pipe cannot be connected to the vertical pipe at a same height. It can be connected in a manner as shown below:

NO.1: Attach the 3-way connection of the drainage pipe joint as shown in Fig.22.

NO.2: Attach the drain elbow as shown in Fig.23.

NO.3: Attach the horizontal pipe as shown in Fig.24.

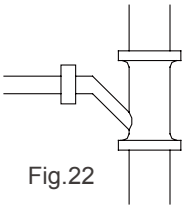


Fig.22

3-way connection of drainage pipe joint

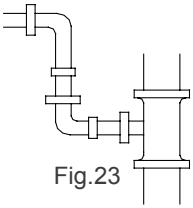


Fig.23

Connection of drain elbow

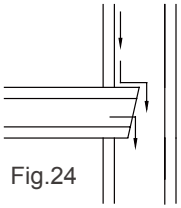


Fig.24

Connection of horizontal pipe

Installation of the Unit

● Precautions When Doing Riser Piping Work

1. Make sure that heat insulation work is executed on the following 2 spots to prevent any possible water leakage due to dew condensation.
   1). Connect the drain hose to the drain lift pipe, and insulate them.
   2). Connect the drain hose to the drain outlet on the indoor unit, and tighten it with the clamp.

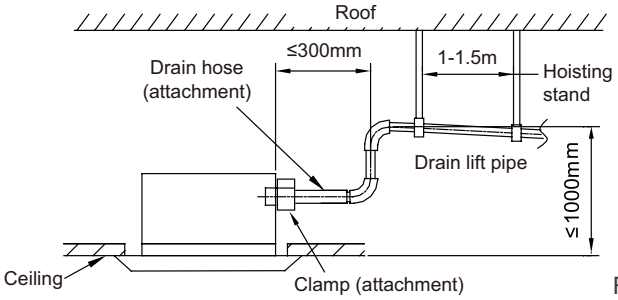


Fig.25

2. Make sure the lift pipe is at most 280mm.
3. Stand the lift pipe vertically, and make sure it is not further than 300mm from the base of the drain outlet.
4. Secure a downward gradient of 1/100 or more for the drain pipe. To accomplish this, mount supporting brackets at an interval of 1 -1.5 m.

● Testing of Drain Piping

After piping work is finished, check if drainage flows smoothly. Shown in the Fig.26, Add approximately 1liter of water slowly into the drain pan and check drainage flow during COOL running.

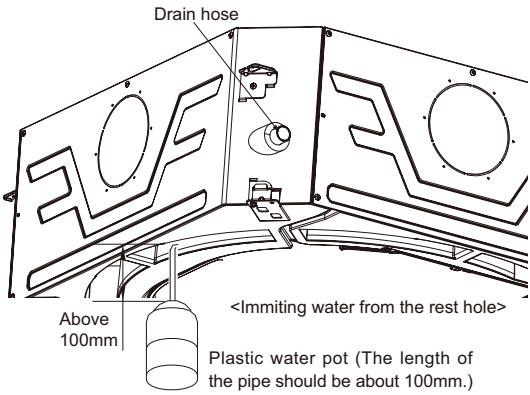


Fig.26

Installation of the Unit

Electrical Wiring

1. Wiring Precautions

WARNING!

- Before obtaining access to terminals, all supply circuits must be disconnected.
- Before turning on, verify that the voltage is within the 198~264V range (for single phrase unit) or 342~457V range (for three-phrase unit).
- Always use a special branch circuit and install a special receptacle to supply power to the air conditioner.
- Use a special branch circuit breaker and receptacle matched to the capacity of the air conditioner.
- The special branch circuit breaker is installed in the permanent wiring. Always use a circuit that can trip all the poles of the wiring and has an isolation distance of at least 3mm between the contacts of each pole.
- Perform wiring work in accordance with standards so that the air conditioner can be operated safely and positively.
- Install a leakage special branch circuit breaker in accordance with the related laws and regulations and electric company standards.

CAUTION!

- The power source capacity must be the sum of the air conditioner current and the current of other electrical appliances. When the current contracted capacity is insufficient, change the contracted capacity.
- When the voltage is low and the air conditioner is difficult to start, contact the power company to raise the voltage.

2. Electrical Wiring

(1). For solid core wiring (Fig.27)

1). Cut the wire end with a wire cutter or wire-cutting pliers, then strip the insulation about 25mm (15/16") .

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.

(2). For strand wiring (Fig.27)

1). Cut the wire end with a wire cutter or wire-cutting pliers, then strip the insulation about 10mm (3/8") .

Installation of the Unit

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.(Fig.28)

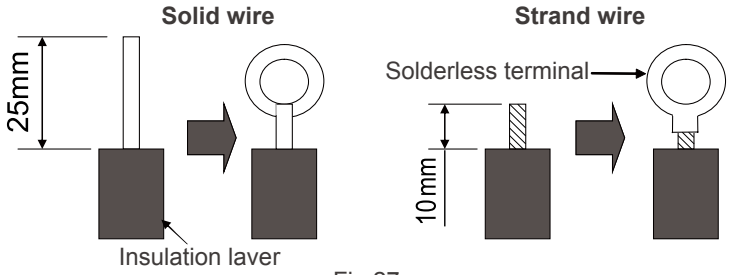


Fig.27

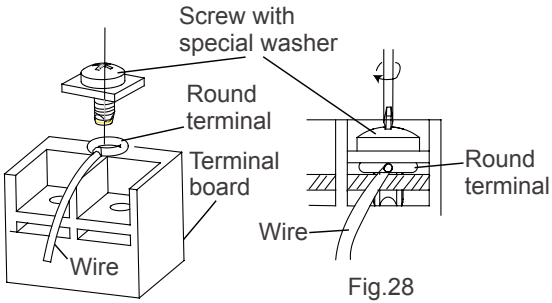


Fig.28

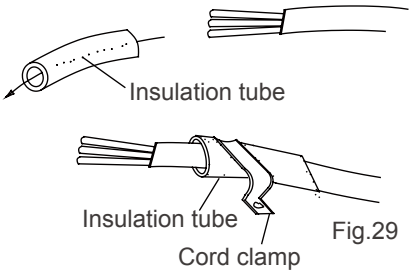


Fig.29

(3). How to fix connection cord and power cord by cord clamp
After passing the connection cord and power cord through the insulation tube, fasten it with the cord clamp.(Fig.29)

CAUTION!

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

Installation of the Unit

(4). Electric wiring of indoor unit side

Remove the electric box cover from the electric box sub-assy and then connect the wire.

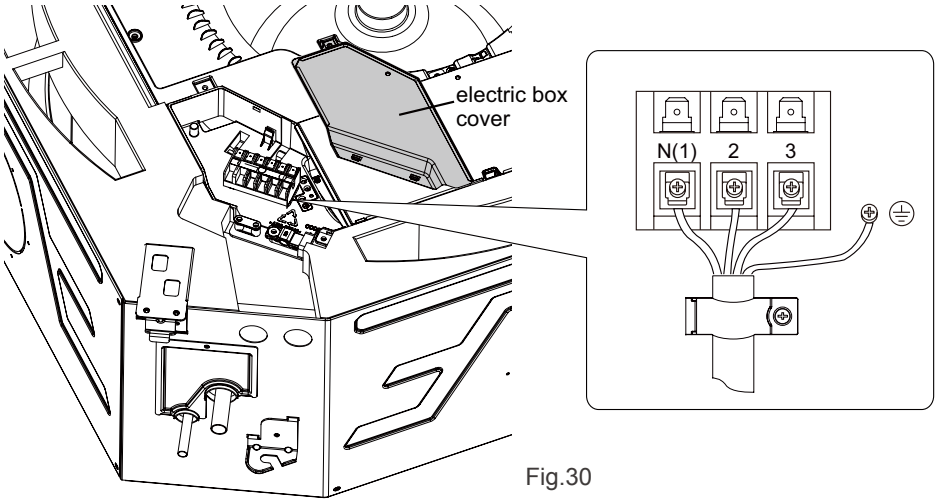


Fig.30

CAUTION!

- The power cord and the wire of the fresh air valve are high-voltage, while the communication cord and connection wire of the wired controller are low-voltage. They should run separately against electromagnetic interference.
- The high-voltage and low-voltage lines should pass through the rubber rings at different electric box covers.
- Do not bundle the connection wire of the wired controller and the communication cord together, or arrange them in parallel, otherwise improper operation would occur.
- The high-voltage and low-voltage lines should be fixed separately and securely, with internal big clamps for the former and small clamps for the latter.
- Tighten the indoor/outdoor connection cord and power cord respectively on the terminal boards with screws. Faulty connection may cause a fire.
- If the indoor unit connection cord (to the outdoor unit) and power supply are wired incorrectly, the air conditioner may be damaged.
- Connect the indoor unit connection cord properly based on the corresponding marks.
- Ground both the indoor and outdoor units by attaching a ground wire.
- Unit shall be grounded in compliance with the applicable local and national codes.

Installation of the Unit

The Panel Installation

● Precautions

1. Improper screwing of the screws may cause the troubles as shown below.

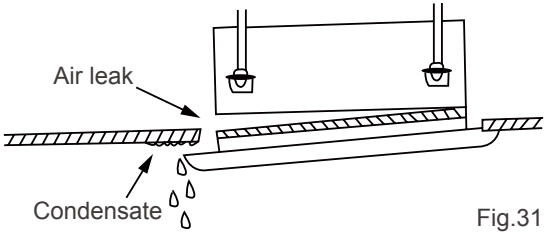


Fig.31

2. If gap still exists between ceiling and decoration panel after tightening the screws, readjust the height of the indoor unit

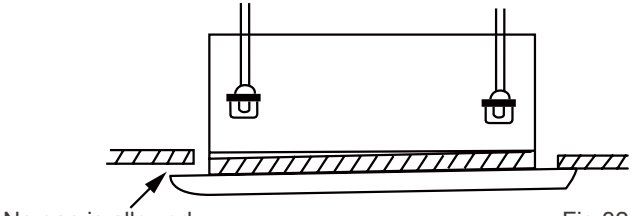


Fig.32

3. Wire the swing flap motor as shown below.

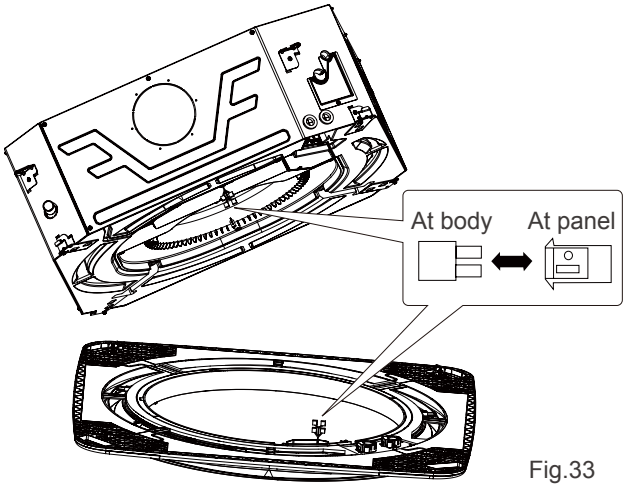


Fig.33

Installation of the Unit

● Installing the Panel

1. Remove the cover board on the corners of the panel. (Pull up the motor cover, then pull out other three as the picture shows.)
2. Keep the panel's swing motor and the pipes connected to the machine on the same side by adjusting the direction of the panel.
3. Fit 4 hooks to the panel of the machine.
4. Fit the panel to the machine with screws.
5. Adjust the outlet location.
6. Tighten the bolts until the panel and the thickness of the sealing material between indoor machine reduces to 5-8 mm, and put back the cover plate.

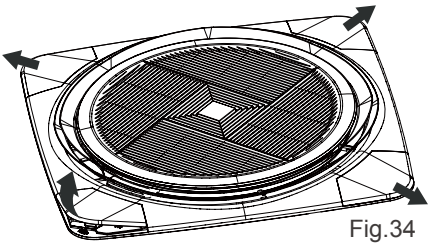


Fig.34

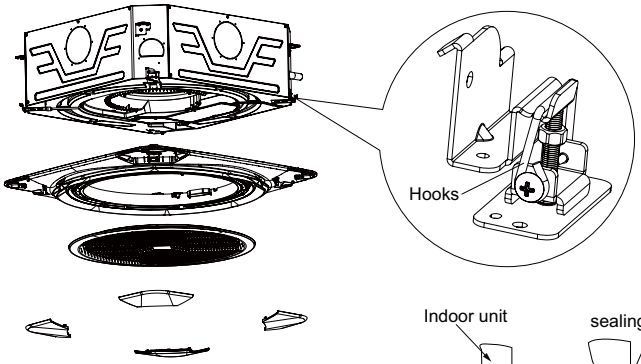
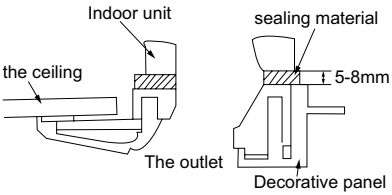


Fig.35



Test Running

Trial Operation and Testing

The meaning of error codes as shown below:

Table 4

Error Code	Name
CL	Filter clean remind
E0	High exhaust temp. protection
E1	Overcapacity protection
E2	Compressor overload protection
E4	System high pressure protection
E5	System low pressure protection
E6	Lack refrigerant/ valve stop protection
L0	Jumper malfunction
L2	No feedback signal of indoor unit fan
L3	Communication malfunction
L7	The communication between indoor unit and wired controller fault
L9	Water full protection
U0	Short/open circuit of indoor environment sensor
U1	Short/open circuit of indoor unit tube sensor
U2	Outdoor temp. sensor open/short circuit
U6	Liquid pipe temp. sensor malfunction
U7	Gas pipe temp. sensor malfunction
PC	Mode conflict

Note:
When the unit is connected with the wired controller, the error code will be simultaneously shown on it.

Test Running

Working Temperature Range

Table 5

The unit may not work properly temperature range					
Cooling operation	Outdoor side temperature: above 52°C or below 15°C Indoor side temperature: below 21°C	Heating operation	Outdoor side temperature: above 24°C or below -15°C Indoor side temperature: above 27°C	Dehumidify operation	Indoor side temperature: below 12°C

Note:

1. The design of this unit conforms to the requirements of EN14511 standard.
2. The air volume is measured at the relevant standard external static pressure.
3. Cooling (heating) capacity stated above is measured under nominal working conditions corresponding to standard external static pressure. The parameters are subject to change with the improvement of products, in which case the values on nameplate shall prevail.
4. In this table, there are two outside DB values under the low temp cooling conditions, and the one in the brackets is for the unit which can operate at extreme low temperature.

Troubleshooting and Maintenance

Troubleshooting

If your air-conditioning unit suffers from abnormal operation or failure, please first check the following points before repair:

Table 6

Failure	Possible Reasons
The unit cannot be started.	1. The power supply is not connected. 2. Electrical leakage of air-conditioning unit causes tripping of the leakage switch. 3. The operating keys are locked. 4. The control loop has failure.
The unit operates for a while and then stops.	1. There is obstacle in front of the condenser. 2. The control loop is abnormal. 3. Cooling operation is selected when the outdoor ambient temperature is above 52°C.
Poor cooling effect.	1. The air filter is dirty or blocked. 2. There is heat source or too many people inside the room. 3. The door or window is open. 4. There is obstacle at the air intake or outlet. 5. The set temperature is too high. 6. There is refrigerant leakage. 7. The performance of room temperature sensor becomes worse
Poor heating effect	1. The air filter is dirty or blocked. 2. The door or window is not firmly closed. 3. The set room temperature is too low . 4. There is refrigerant leakage. 5. The outdoor ambient temperature is lower than -5°C. 6. Control loop is abnormal.

After carrying out the check of the above items and taking relevant measures to solve the problems found but the air-conditioning unit still does not function well, please stop the operation of the unit immediately and contact the local service agency. Only ask professional serviceman to check and repair the unit.

Troubleshooting and Maintenance

Routine Maintenance

Only a qualified service person is allowed to perform maintenance.

Before accessing to terminal devices, all power supply circuits must be disconnected.

Do not use water or air of 50°C or higher for cleaning air filters and outside panels.

Note:

1. Do not operate the air conditioner with the filter uninstalled, otherwise dust would come into the unit.
2. Do not remove the air filter except for cleaning. Unnecessary handling may damage the filter.
3. Do not clean the unit with gasolene, benzene, thinner, polishing powder or liquid insecticide, otherwise it would cause discoloration and deformation of the unit.
4. Do not wet the indoor unit in case of electric shock or fire hazard.

Increase the frequency of cleaning if the unit is installed in a room where the air is extremely contaminated.(As a yardstick for yourself, consider cleaning the filter once a half year.)

If dirt becomes impossible to clean, change the air filter.

(1). Remove the intake grille by removing the screw stopper and unscrewing the intake grille as the picture shows.

(2). Remove the filter from the grille.

(3). Cleaning the air filter

Use dust catcher or water to clean the filter. when the filter is very dirty, use the water (below 45°C) to clean it, and then put it in a shady and cool place to dry.

(4). Fit the filter and install the intake grille.

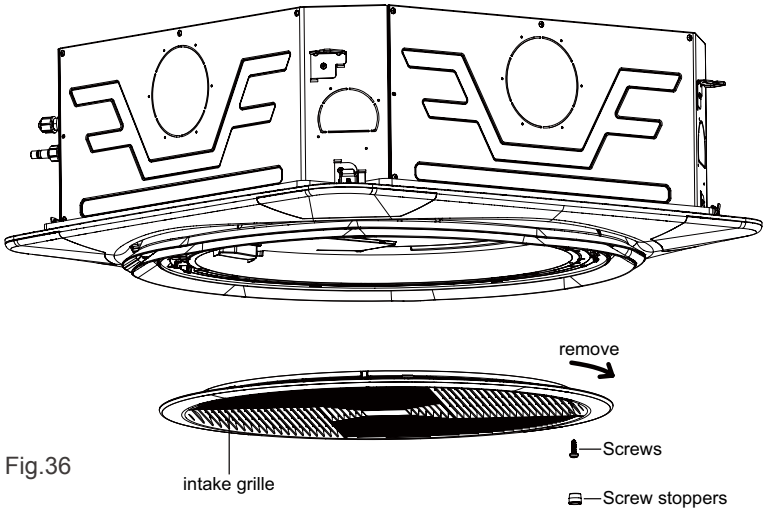


Fig.36

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