



1. THE FOLLOWING SHOULD ALWAYS BE OBSERVED FOR SAFETY

- Please provide an exclusive circuit for the air conditioner and do not connect other electrical appliances to it.
Please report to your supply authority or obtain their consent before connecting this equipment to the power supply system.
Be sure to read "THE FOLLOWING SHOULD ALWAYS BE OBSERVED FOR SAFETY" before installing the air conditioner.
Be sure to observe the cautions specified here as they include important items related to safety.
The indications and meanings are as follows.

CAUTION
Could lead to death, serious injury, etc.

CAUTION
Could lead to serious injury in particular environments when operated incorrectly.

WARNING
Do not install the unit by yourself (customer). Incomplete installation could cause injury due to fire, electric shock, the unit falling or leakage of water.

WARNING
Install the unit securely in a place which can bear the weight of the unit. When installed in an insecurely strong place, the unit could fall causing injury.

WARNING
Use the indoor/outdoor unit connecting wire that meets the Standards to connect the indoor and outdoor units and fix the wire to the terminal block securely so that no external force is conveyed to the connecting section of the terminal block.

WARNING
Incomplete connection or fixing of the wire could result in a fire. Do not use intermediate connection of the power cord or the extension cord and do not connect many devices to one AC outlet.

WARNING
Check that the refrigerant gas do not leak after installation has completed. Perform the installation securely referring to the installation manual. Incomplete installation could cause a personal injury due to fire, electric shock, the unit falling or leakage of water.

WARNING
Perform electrical work according to the installation manual and be sure to use an exclusive circuit. If the capacity of the power circuit is insufficient or there is incomplete electrical work, it could result in a fire or an electric shock.

WARNING
Attach the electrical cover to the indoor unit and the service panel to the outdoor unit securely. If the electrical cover in the indoor unit and/or the service panel in the outdoor unit are not attached securely, it could result in fire or an electric shock due to dust, water, etc.

WARNING
Be sure to use the part provided or specified parts for the installation work. The use of defective parts could cause an injury due to fire, an electric shock, the unit falling, leakage of water, etc.

WARNING
Be sure to cut off the main power in case of setting up the indoor electronic control P.C. board or wiring works. It could cause an electric shock.

2. SELECTING THE INSTALLATION LOCATION

2-1 INDOOR UNIT
Where airflow is not blocked.
Where cool air spreads over the entire room.
Maximum refrigerant piping length between indoor unit and outdoor unit is 15 m and the difference of height of both units is 5 m max.

2-2 OUTDOOR UNIT
Where it is not exposed to strong wind.
Where airflow is not blocked and dusts do not collect.
Where it is not exposed to rain and direct sunshine.

2-3 WIRELESS REMOTE CONTROLLER MOUNTING
Place of mounting
Mounting
Select a position approx. 1.2 m above the floor, check that signals from the remote controller are surely received by the indoor unit from that position ('beep' or 'beep-beep' receiving tone sounds).

3. INSTALLATION DIAGRAM & ACCESSORIES

FLARED CONNECTIONS
This unit has flared connections on both indoor and outdoor sides.
Remove the valve cover of the outdoor unit, then connect the pipe.
Refrigerant pipes are used to connect the indoor and outdoor units.

Table with 2 columns: Limits (Pipe length, Height difference, No. of bends) and Values (15 m max., 5 m max., 10 max.).

Refrigerant adjustment... If pipe length exceeds 7 m, additional refrigerant (R-407C) charge is required.
(The outdoor unit is charged with refrigerant for pipe length up to 7 m.)

Table with 2 columns: Pipe length (Up to 7 m, Exceeding 7 m) and Refrigerant to be added (MSH type, MS type).

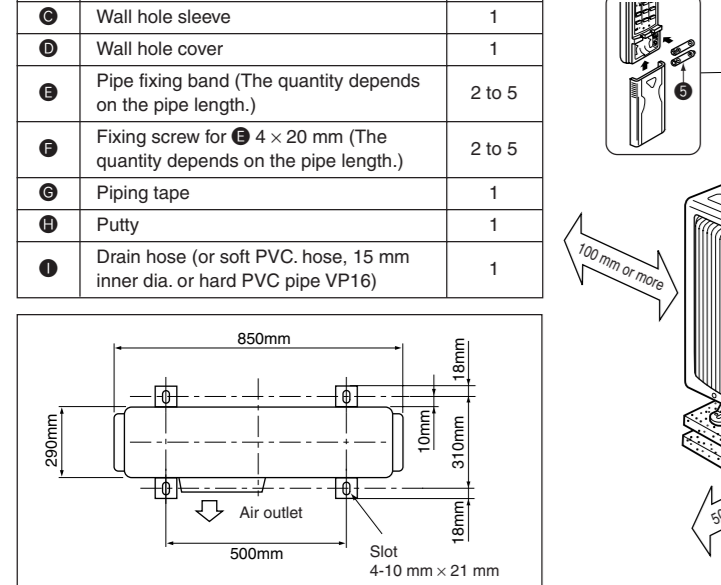
ACCESSORIES

- Installation plate 1
Installation plate fixing screw 4 x 25 mm 5
Remote controller mounting hardware 1
Fixing screw for 3.5 x 15 mm (Black) 2
Battery (AAA) for remote controller 2
Wireless remote controller 1
Felt tape (Used for left or left-rear piping) 1
Refrigeration oil 1

<Outdoor unit: MUH type>
Drain socket 1
Drain cap ø33 2
Drain cap ø16 1

PART TO BE PROVIDED AT YOUR SITE

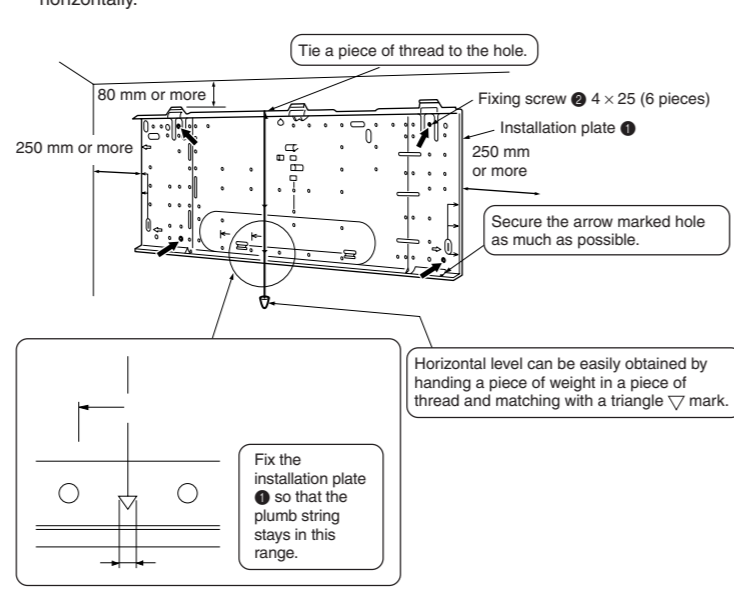
- Indoor/outdoor unit connecting wire 3-core 2.0 mm² (MS-C18 type) 1
4-core 2.0 mm² (MSH-C18 type) 1
4-core 2.5 mm² (MS-C24 type) 1
Extension pipe 1
Wall hole sleeve 1
Wall hole cover 1
Pipe fixing band (The quantity depends on the pipe length.) 2 to 5
Fixing screw for 4 x 20 mm (The quantity depends on the pipe length.) 2 to 5
Piping tape 1
Putty 1
Drain hose (or soft PVC hose, 15 mm inner dia. or hard PVC pipe VP16) 1



Units should be installed by licensed contractor according to local code requirement.

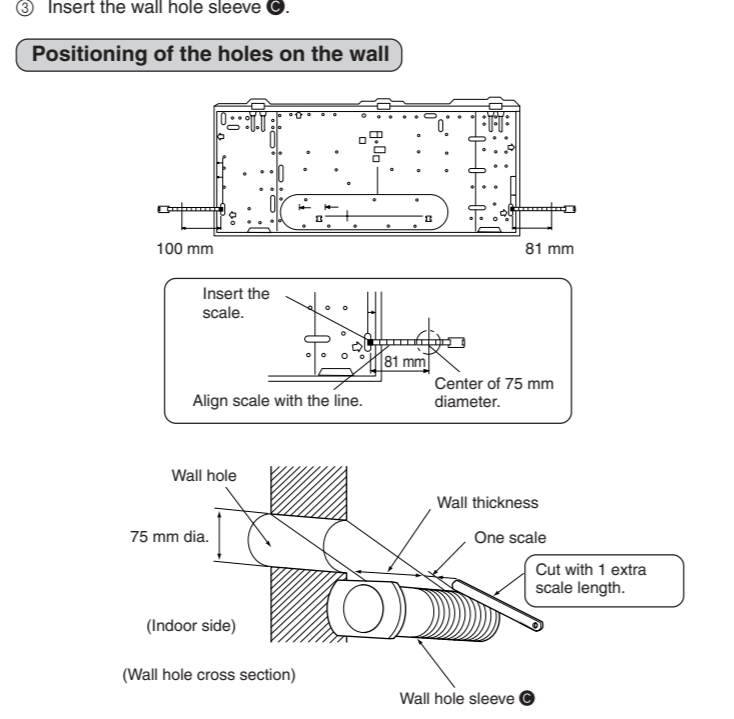
4. INDOOR UNIT INSTALLATION

4-1 FIXING OF INSTALLATION PLATE

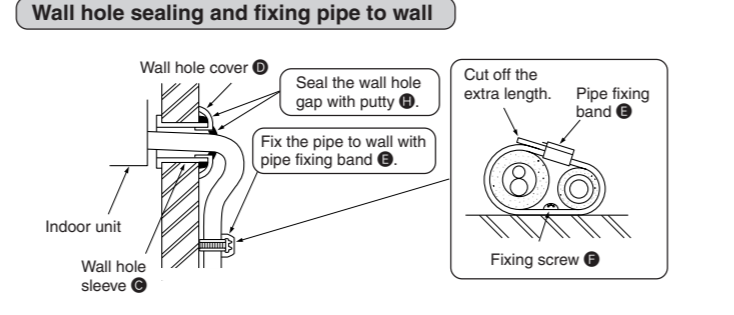


When bolts recessed in the concrete wall are to be utilized, secure the installation plate using 11 x 20 x 11 x 26 oval hole (450 mm pitch). If the recessed bolt is too long, change it for a shorter one available in the market.

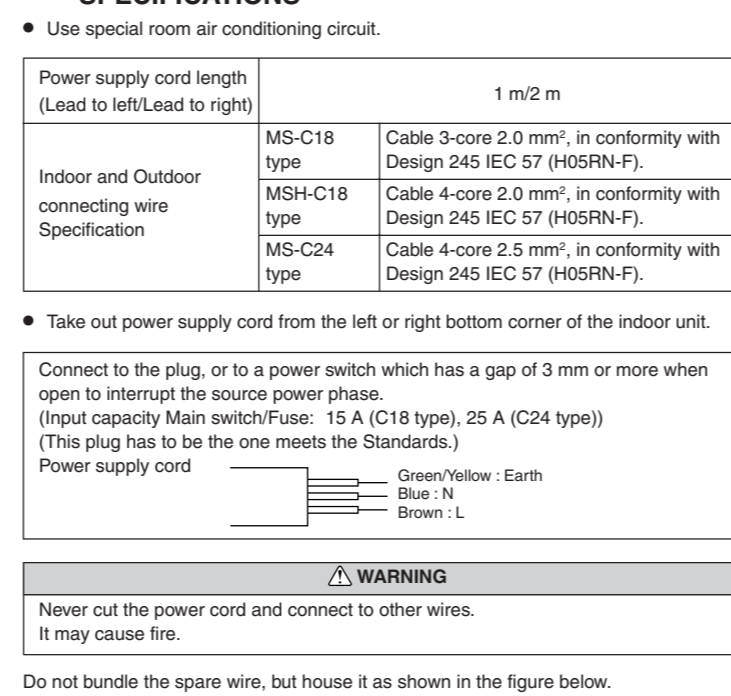
4-2 WALL HOLE DRILLING



Wall hole sleeve is used to prevent the outdoor connecting wires from contacting with metal part in the wall and to prevent damage by rat in case the wall is hollow.

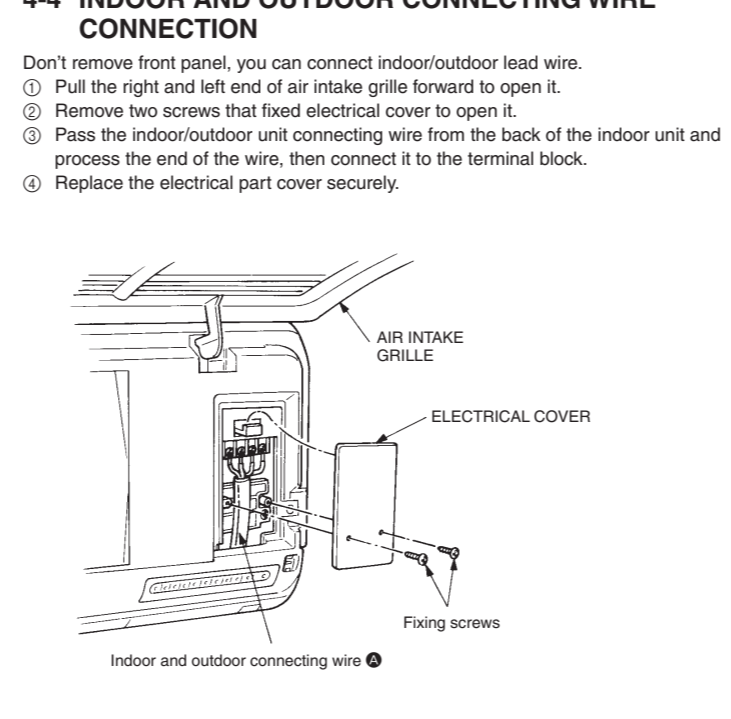


4-3 POWER SUPPLY AND CONNECTING WIRE SPECIFICATIONS

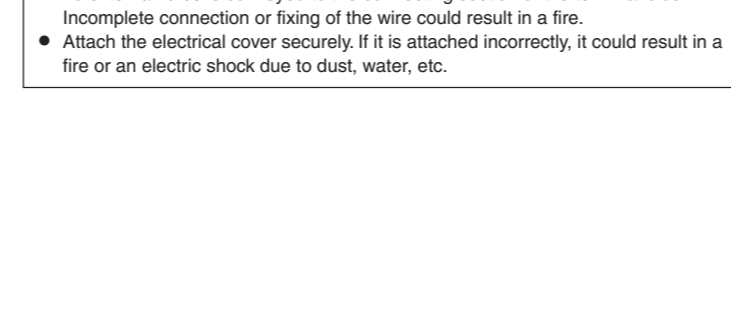


Connect to the plug, or to a power switch which has a gap of 3 mm or more when open to interrupt the source power phase. (Input capacity Main switch/Fuse: 15 A (C18 type), 25 A (C24 type))

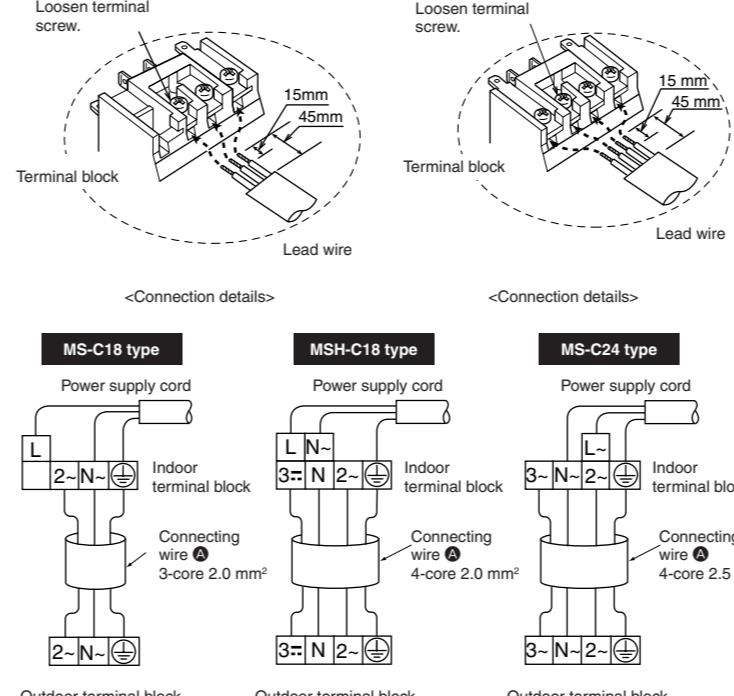
4-4 INDOOR AND OUTDOOR CONNECTING WIRE CONNECTION



Use the indoor/outdoor unit connecting wire that meets the Standards to connect the indoor and outdoor units and fix the wire to the terminal block securely so that no external force is conveyed to the connecting section of the terminal block.

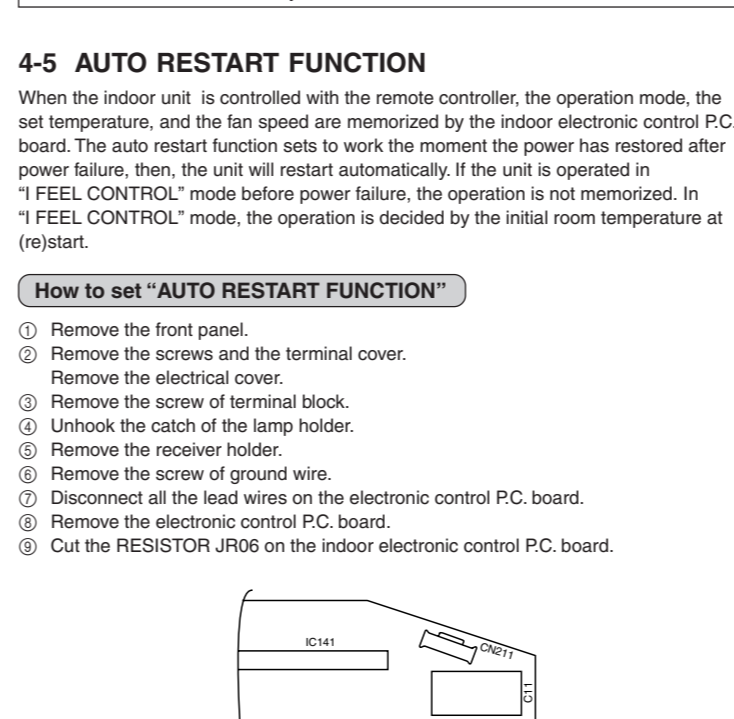


4-5 AUTO RESTART FUNCTION

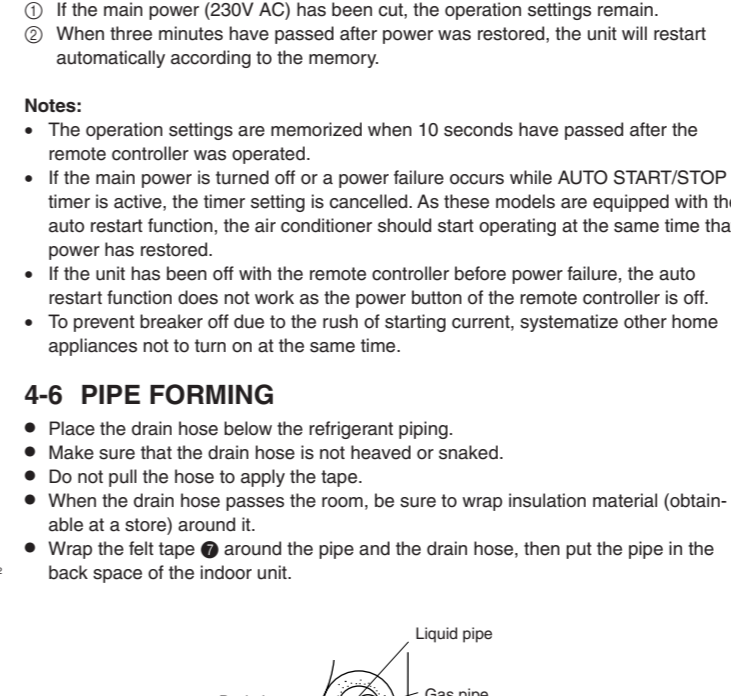


Remove the front panel. Remove the screws and the terminal cover. Remove the screw of terminal block. Unhook the catch of the lamp holder. Remove the receiver holder. Remove the screw of ground wire. Disconnect all the lead wires on the electronic control P.C. board. Remove the electronic control P.C. board. Connect the RESISTOR JRO6 on the indoor electronic control P.C. board.

How to set "AUTO RESTART FUNCTION"

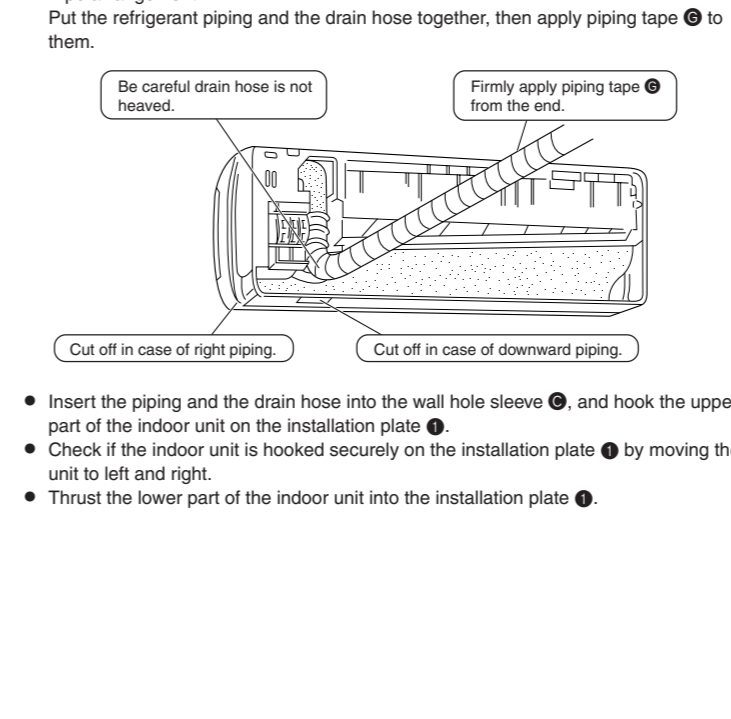


FOR LEFT OR LEFT-REAR PIPING



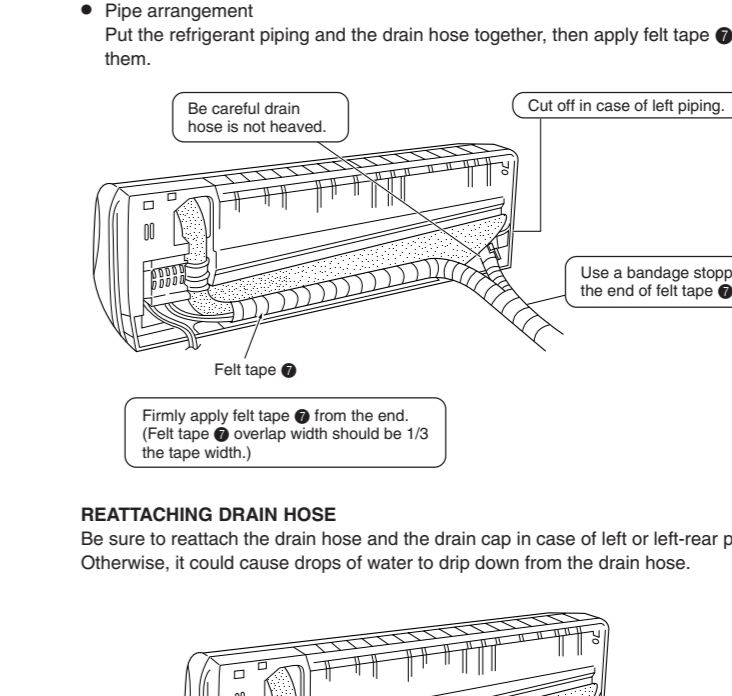
Be careful not to make mis-wiring. Firmly tighten the terminal screws to prevent them from loosening. After tightening, pull the wires lightly to confirm that they do not move. If the connecting wire is incorrectly connected to the terminal block, the unit does not operate normally. If an earth is incorrect, it may cause an electric shock.

FOR REAR, RIGHT OR DOWNWARD PIPING



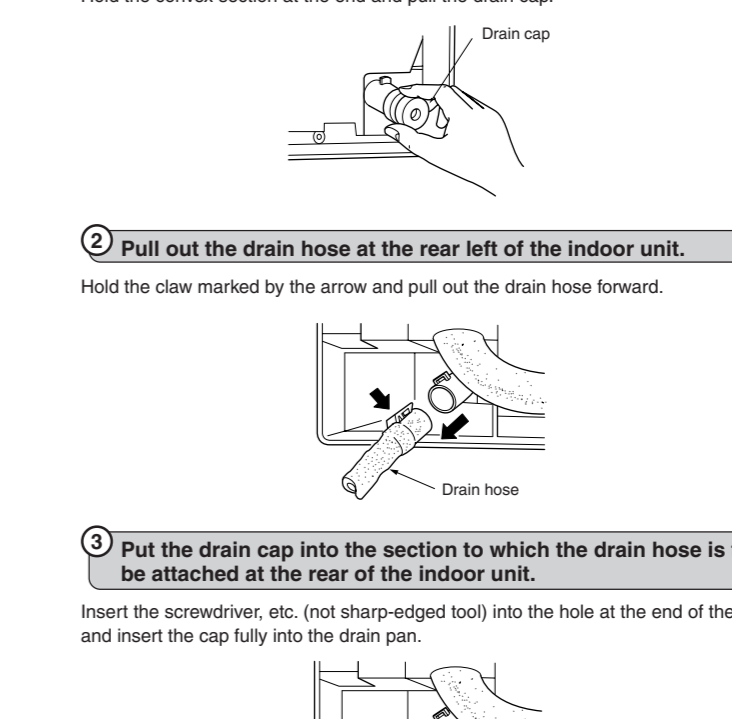
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REATTACHING DRAIN HOSE



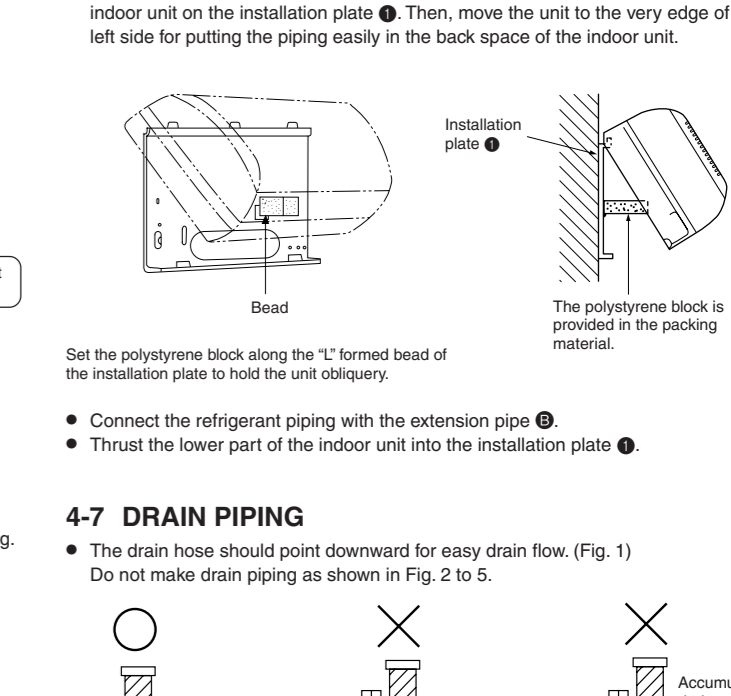
Be sure to reattach the drain hose and the drain cap in case of left or left-rear piping. Otherwise, it could cause drops of water to drip down from the drain hose.

FOR REAR, RIGHT OR DOWNWARD PIPING



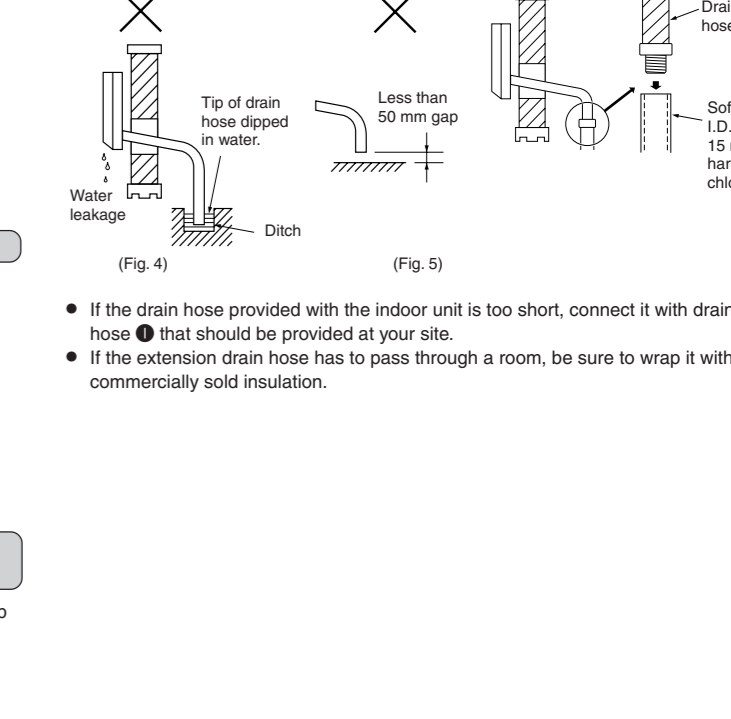
Be careful not to make mis-wiring. Firmly tighten the terminal screws to prevent them from loosening. After tightening, pull the wires lightly to confirm that they do not move. If the connecting wire is incorrectly connected to the terminal block, the unit does not operate normally. If an earth is incorrect, it may cause an electric shock.

INDOOR UNIT INSTALLATION



Insert the drain hose into the wall hole sleeve, and hook the upper part of indoor unit on the installation plate. Then, move the unit to the very edge of the left side for putting the piping easily in the back space of the indoor unit.

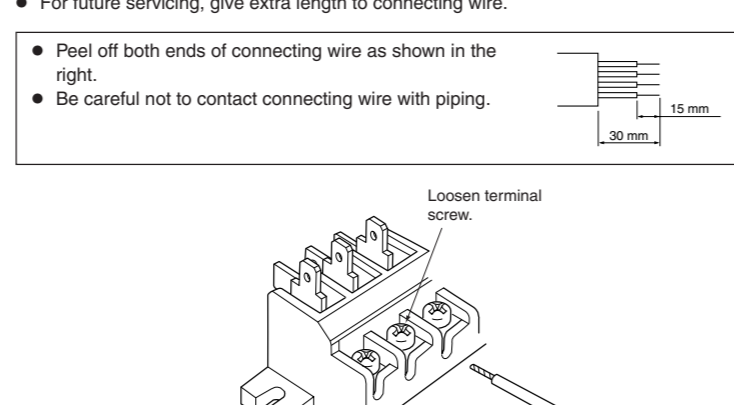
4-7 DRAIN PIPING



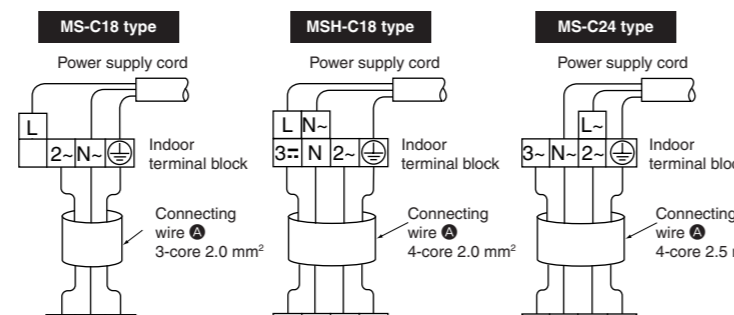
The drain hose should point downward for easy drain flow. Do not make drain piping as shown in Fig. 2 to 5.

5. OUTDOOR UNIT INSTALLATION

INDOOR AND OUTDOOR WIRE CONNECTION

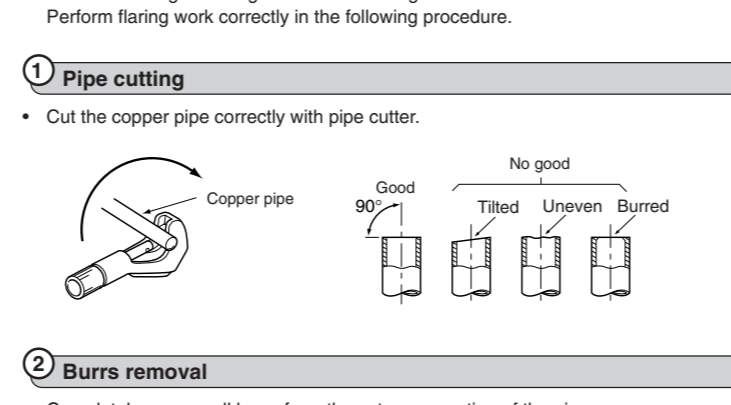


Peel off both ends of connecting wire as shown in the right. Be careful not to contact connecting wire with piping.

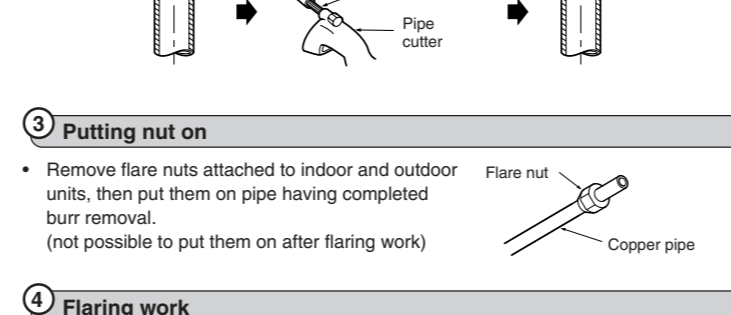


6. INDOOR/OUTDOOR UNIT CONNECTION FINISHING AND TEST RUN

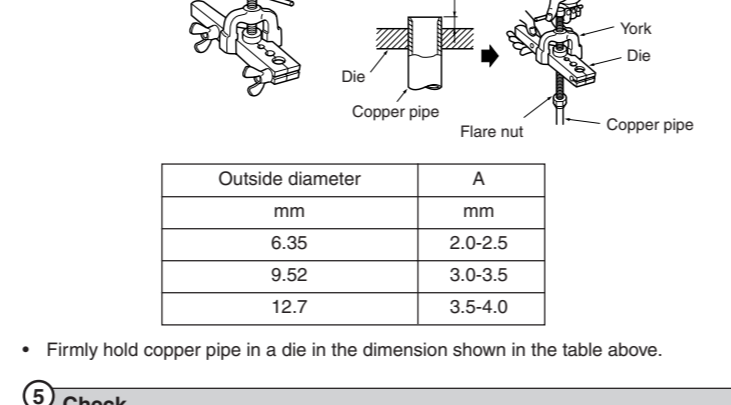
6-1 FLARING WORK



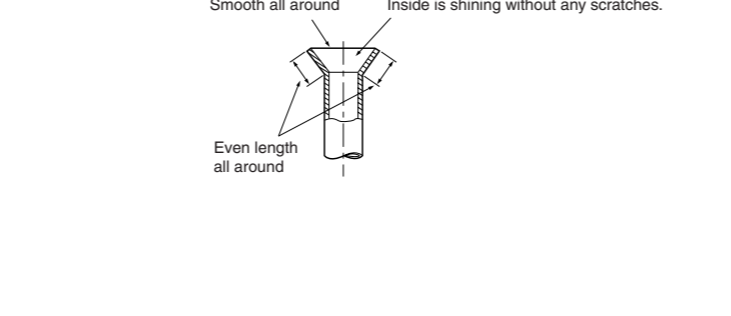
Remove flare nuts attached to indoor and outdoor units, then put them on pipe having completed burr removal. (not possible to put them on after flaring work)



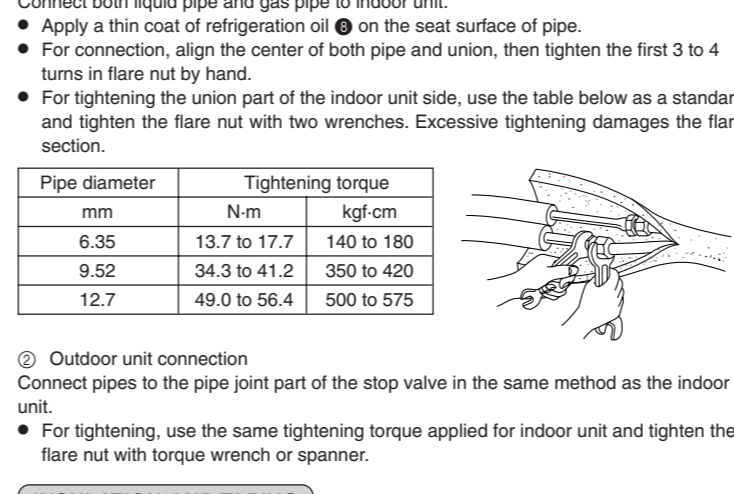
6-2 PIPE CONNECTION



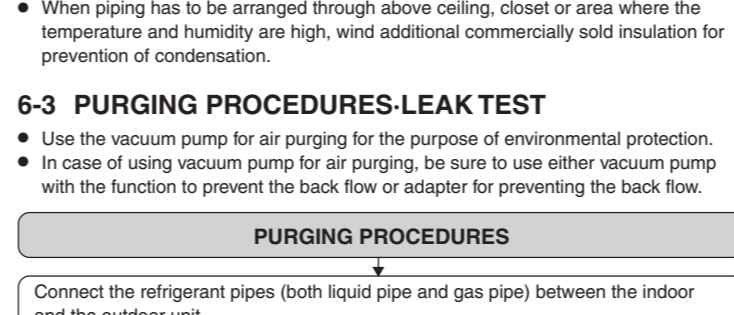
Remove the gauge manifold valve and the vacuum pump to the service port of the stop valve on the gas pipe side of the outdoor unit. Run the vacuum pump. (Vacuumize for more than 15 minutes.)



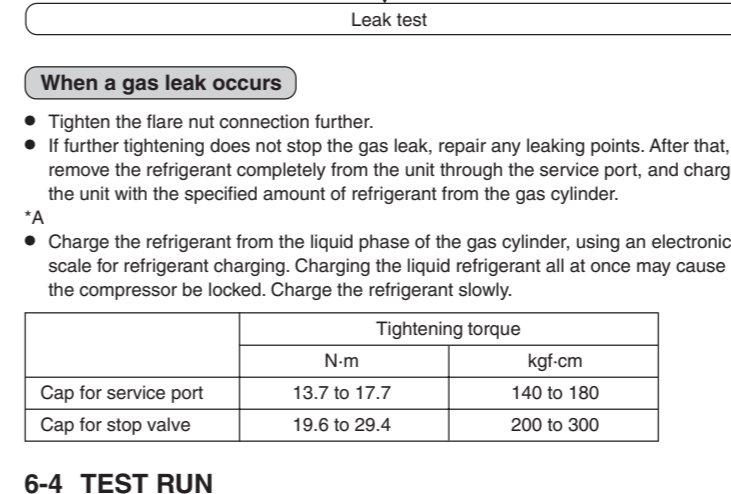
6-3 PURGING PROCEDURES-LEAK TEST



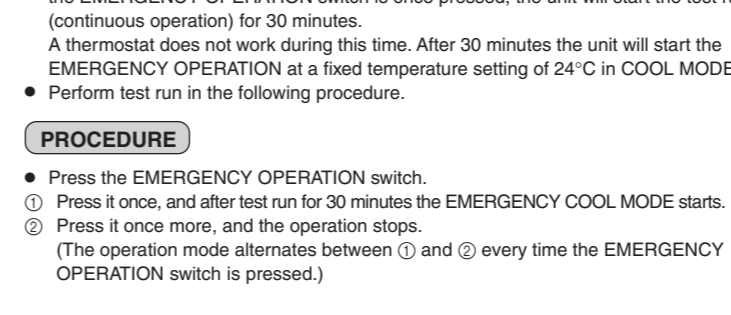
Remove the gauge manifold valve and the vacuum pump to the service port of the stop valve on the gas pipe side of the outdoor unit. Run the vacuum pump. (Vacuumize for more than 15 minutes.)



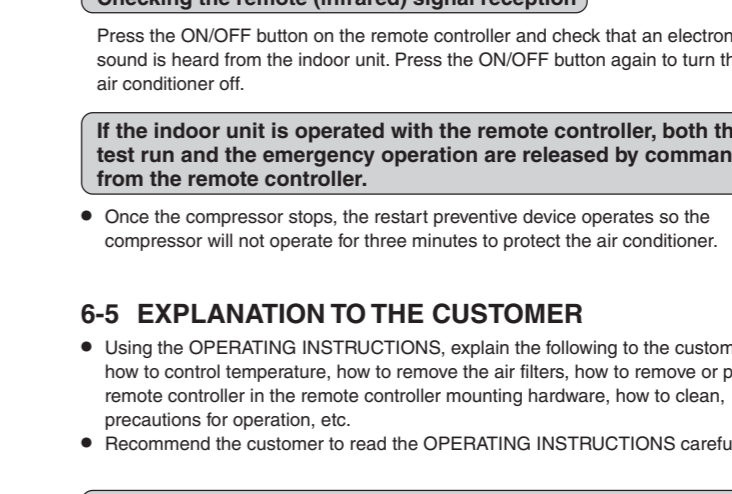
6-4 TEST RUN



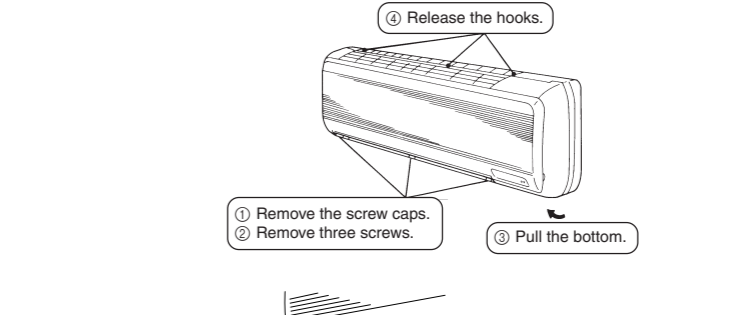
Before performing the test run, recheck any wrong wiring. Wrong wiring prevents normal operation or results in blown fuse disabling operation. The test run can be started by pressing EMERGENCY OPERATION switch. When the EMERGENCY OPERATION switch is once pressed, the unit will start the test run (continuous operation) for 30 minutes.



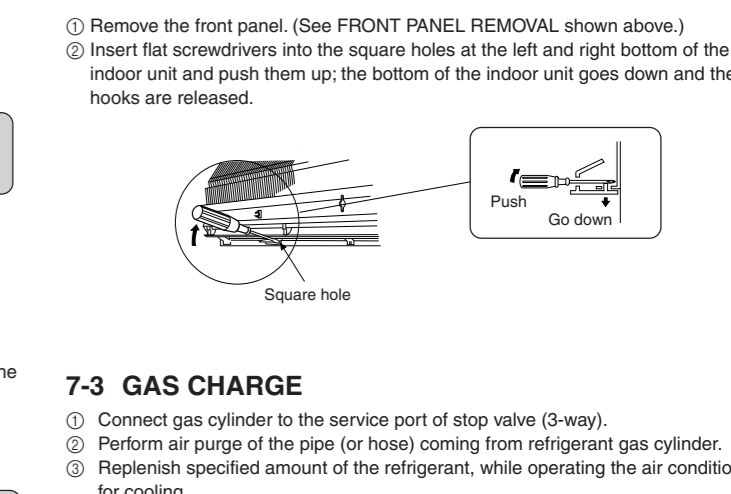
MS type and MSH type



When a gas leak occurs
Tighten the flare nut connection further. If further tightening does not stop the gas leak, repair any leaking points. After that, remove the refrigerant completely from the unit through the service port, and charge the unit with the specified amount of refrigerant from the gas cylinder.

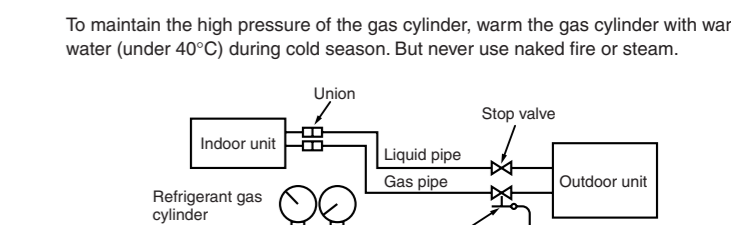


7-2 REMOVING THE INDOOR UNIT



Remove the front panel. (See FRONT PANEL REMOVAL shown above.) Insert flat screwdrivers into the square holes at the left and right bottom of the indoor unit and push them up; the bottom of the indoor unit goes down and the hooks are released.

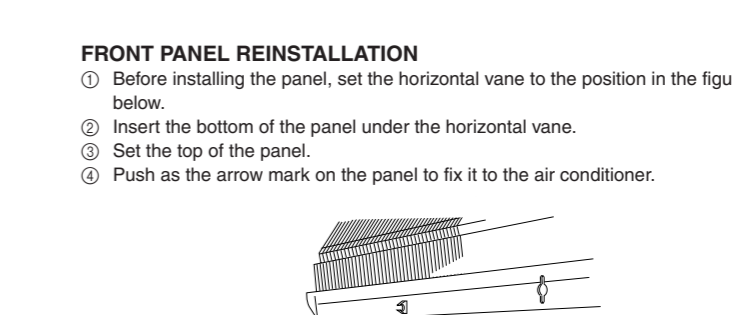
7-3 GAS CHARGE



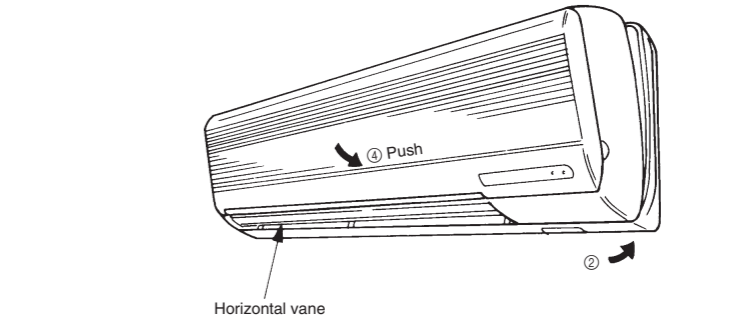
Connect gas cylinder to the service port of stop valve (3-way). Perform air purge of the pipe (or hose) coming from refrigerant gas cylinder. Replenish specified amount of the refrigerant, while operating the air conditioner for cooling.

7. FOR MOVEMENT AND MAINTENANCE

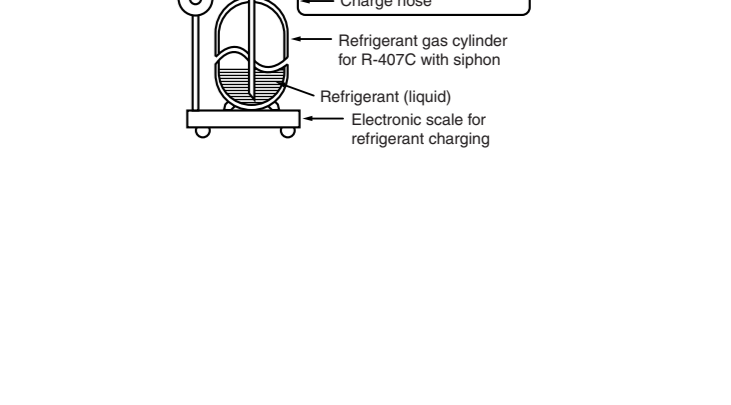
7-1 REMOVING AND REINSTALLING THE FRONT PANEL



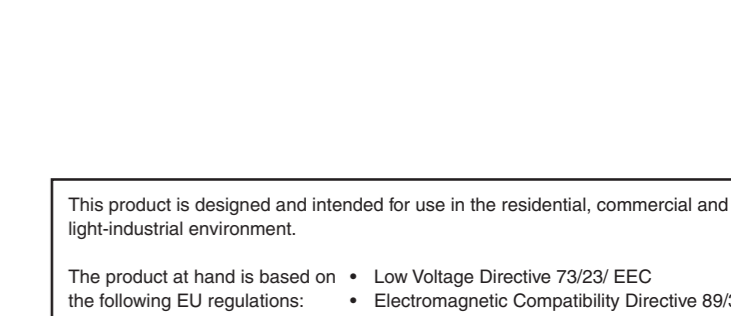
Before installing the panel, set the horizontal vane to the position in the figure below. Insert the bottom of the panel under the horizontal vane. Set the top of the panel. Push as the arrow mark on the panel to fit it to the air conditioner.



FRONT PANEL REINSTALLATION



Before installing the panel, set the horizontal vane to the position in the figure below. Insert the bottom of the panel under the horizontal vane. Set the top of the panel. Push as the arrow mark on the panel to fit it to the air conditioner.



This product is designed and intended for use in the residential, commercial and light-industrial environment. The product at hand is based on the following EU regulations: Low Voltage Directive 73/23/EEC, Electromagnetic Compatibility Directive 89/336/EEC