

INSTALLATION DIRECTIONS

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Safety precautions

- When install the unit, be sure to check whether the selection of installation place, power supply specifications, usage limitation (piping length, height differences between indoor and outdoor units, power supply voltage and etc.) and installation spaces.
- We recommend you to read this “SAFETY PRECAUTIONS” carefully before the installation work in order to gain full advantage of the functions of the unit and to avoid malfunction due to mishandling.
- The precautions described below are divided into **⚠WARNING** and **⚠CAUTION**. The matters with possibilities leading to serious consequences such as death or serious personal injury due to erroneous handling are listed in the **⚠WARNING** and the matters with possibilities leading to personal injury or damage of the unit due to erroneous handling including probability leading to serious consequences in some cases are listed in **⚠CAUTION**. These are very important precautions for safety. Be sure to observe all of them without fail.
- Be sure to confirm no anomaly on the equipment by commissioning after completed installation and explain the operating methods as well as the maintenance methods of this equipment to the user according to the owner’s manual.
- Keep the installation manual together with owner’s manual at a place where any user can read at any time. Moreover if necessary, ask to hand them to a new user.
- For installing qualified personnel, take precautions in respect to themselves by using suitable protective clothing, groves, etc., and then perform the installation works.
- Please pay attention not to fall down the tools, etc. when installing the unit at the high position.
- If unusual noise can be heard during operation, consult the dealer.
- Symbols which appear frequently in the text have the following meaning:

	Observe instructions with great care		Strictly prohibited		Provide proper earthing
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WARNING

	<ul style="list-style-type: none"> • Installation must be carried out by the qualified installer. If you install the system by yourself, it may cause serious trouble such as water leaks, electric shocks, fire and personal injury, as a result of a system malfunction. • Install the system in full accordance with the instruction manual. Incorrect installation may cause bursts, personal injury, water leaks, electric shocks and fire. • Be sure to use only for household and residence. If this appliance is installed in inferior environment such as machine shop and etc., it can cause malfunction. • Use the original accessories and the specified components for installation. If parts other than those prescribed by us are used, it may cause water leaks, electric shocks, fire and personal injury. • Install the unit in a location with good support. Unsuitable installation locations can cause the unit to fall and cause material damage and personal injury. • Ensure the unit is stable when installed, so that it can withstand earthquakes and strong winds. Unsuitable installation locations can cause the unit to fall and cause material damage and personal injury. • Ventilate the working area well in the event of refrigerant leakage during installation. If the refrigerant comes into contact with naked flames, poisonous gas is produced. • When installing in small rooms, take prevention measures not to exceed the density limit of refrigerant in the event of leakage. Consult the expert about prevention measures. If the density of refrigerant exceeds the limit in the event of leakage, lack of oxygen can occur, which can cause serious accidents. • After completed installation, check that no refrigerant leaks from the system. If refrigerant leaks into the room and comes into contact with an oven or other hot surface, poisonous gas is produced. • Use the prescribed pipes, flare nuts and tools for R410A. Using existing parts (for R22 or R407C) can cause the unit failure and serious accidents due to burst of the refrigerant circuit. • Tighten the flare nut by torque wrench with specified method. If the flare nut were tightened with excess torque, this may cause burst and refrigerant leakage after a long period. • Do not open the operation valves for liquid line and gas line until completed refrigerant piping work, air tightness test and evacuation. If the compressor is operated in state of opening operation valves before completed connection of refrigerant piping work, air can be sucked into refrigerant circuit, which can cause burst or personal injury due to anomalously high pressure in the refrigerant. 	<ul style="list-style-type: none"> • The electrical installation must be carried out by the qualified electrician in accordance with “the norm for electrical work” and “national wiring regulation”, and the system must be connected to the dedicated circuit. Power supply with insufficient capacity and incorrect function done by improper work can cause electric shocks and fire. • Be sure to shut off the power before starting electrical work. Failure to shut off the power can cause electric shocks, unit failure or incorrect function of equipment. • Be sure to use the cables conformed to safety standard and cable ampacity for power distribution work. Unconformable cables can cause electric leak, anomalous heat production or fire. • This appliance must be connected to main power supply by means of a circuit breaker or switch (fuse:16A) with a contact separation of at least 3mm. • When plugging this appliance, a plug conforming to the norm IEC60884-1 must be used. • Use the prescribed cables for electrical connection, tighten the cables securely in terminal block and relieve the cables correctly to prevent overloading the terminal blocks. Loose connections or cable mountings can cause anomalous heat production or fire. • Arrange the wiring in the control box so that it cannot be pushed up further into the box. Install the service panel correctly. Incorrect installation may result in overheating and fire. • Be sure to fix up the service panels. Incorrect fixing can cause electric shocks or fire due to intrusion of dust or water. • Be sure to switch off the power supply in the event of installation, inspection or servicing. If the power supply is not shut off, there is a risk of electric shocks, unit failure or personal injury due to the unexpected start of fan. • Stop the compressor before disconnecting refrigerant pipes in case of pump down operation. If disconnecting refrigerant pipes in state of opening operation valves before compressor stopping, air can be sucked, which can cause burst or personal injury due to anomalously high pressure in the refrigerant circuit. • Only use prescribed optional parts. The installation must be carried out by the qualified installer. If you install the system by yourself, it can cause serious trouble such as water leaks, electric shocks, fire.
	<ul style="list-style-type: none"> • Do not put the drainage pipe directly into drainage channels where poisonous gases such as sulphide gas can occur. Poisonous gases will flow into the room through drainage pipe and seriously affect the user’s health and safety. • Ensure that no air enters in the refrigerant circuit when the unit is installed and removed. If air enters in the refrigerant circuit, the pressure in the refrigerant circuit becomes too high, which can cause burst and personal injury. • Do not processing, splice the power cord, or share a socket with other power plugs. This may cause fire or electric shock due to defecting contact, defecting insulation and over-current etc. 	<ul style="list-style-type: none"> • Do not bundling, winding or processing for the power cord. Or, do not deforming the power plug due to treat it. This may cause fire or heating. • Do not vent R410A into the atmosphere : R410A is a fluorinated greenhouse gas, covered by the Kyoto Protocol with Global Warming Potential (GWP)=1975. • Do not run the unit with removed panels or protections. Touching rotating equipments, hot surfaces or high voltage parts can cause personal injury due to entrapment, burn or electric shocks. • Do not perform any change of protective device itself or its setup condition. The forced operation by short-circuiting protective device of pressure switch and temperature controller or the use of non specified component can cause fire or burst.
	<ul style="list-style-type: none"> • Carry out the electrical work for ground lead with care. Do not connect the ground lead to the gas line, water line, lightning conductor or telephone line’s ground lead. Incorrect grounding can cause unit faults such as electric shocks due to short-circuiting. 	

⚠ CAUTION



- **Use the circuit breaker with sufficient breaking capacity.**
If the breaker does not have sufficient breaking capacity, it can cause the unit malfunction and fire.
- **Earth leakage breaker must be installed.**
If the earth leakage breaker is not installed, it can cause electric shocks.
- **Install isolator or disconnect switch on the power supply wiring in accordance with the local codes and regulations.**
- **Be sure to install indoor unit properly according to the instruction manual in order to run off the drainage smoothly.**
Improper installation of indoor unit can cause dropping water into the room and damaging personal property.
- **Install the drainage pipe to run off drainage securely according to the installation manual.**
Incorrect installation of the drainage pipe can cause dropping water into the room and damaging personal property.
- **Be sure to install the drainage pipe with descending slope of 1/100 or more, and not to make traps and air-bleedings.**
Check if the drainage runs off securely during commissioning and ensure the space for inspection and maintenance.
- **After maintenance, all wiring, wiring ties and the like, should be returned to their original state and wiring route, and the necessary clearance from all metal parts should be secured.**
- **Secure a space for installation, inspection and maintenance specified in the manual.**
Insufficient space can result in accident such as personal injury due to falling from the installation place.



- **Do not install the unit in the locations listed below.**
 - Locations where carbon fiber, metal powder or any powder is floating.
 - Locations where any substances that can affect the unit such as sulphide gas, chloride gas, acid and alkaline can occur.
 - Vehicles and ships.
 - Locations where cosmetic or special sprays are often used.
 - Locations with direct exposure of oil mist and steam such as kitchen and machine plant.
 - Locations where any machines which generate high frequency harmonics are used.
 - Locations with salty atmospheres such as coastlines.
 - Locations with heavy snow (If installed, be sure to provide base flame and snow hood mentioned in the manual).
 - Locations where the unit is exposed to chimney smoke.
 - Locations at high altitude (more than 1000m high).
 - Locations with ammoniac atmospheres.
 - Locations where heat radiation from other heat source can affect the unit.
 - Locations without good air circulation.
 - Locations with any obstacles which can prevent inlet and outlet air of the unit.
 - Locations where short circuit of air can occur (in case of multiple units installation).
 - Locations where strong air blows against the air outlet of outdoor unit. It can cause remarkable decrease in performance, corrosion and damage of components, malfunction and fire.
- **Do not install the indoor unit in the locations listed below (Be sure to install the indoor unit according to the installation manual for each model because each indoor unit has each limitation).**
 - Locations with any obstacles which can prevent inlet and outlet air of the unit.
 - Locations where vibration can be amplified due to insufficient strength of structure.
 - Locations where the infrared receiver is exposed to the direct sunlight or the strong light beam (in case of the infrared specification unit).
 - Locations where an equipment affected by high harmonics is placed (TV set or radio receiver is placed within 1m).
 - Locations where drainage cannot run off safely. It can affect performance or function and etc.
- **Do not install the outdoor unit in the locations listed below.**
 - Locations where discharged hot air or operating sound of the outdoor unit can bother neighborhood.
 - Locations where outlet air of the outdoor unit blows directly to plants.
 - Locations where vibration can be amplified and transmitted due to insufficient strength of structure.
 - Locations where vibration and operation sound generated by the outdoor unit can affect seriously (on the wall or at the place near bed room).
 - Locations where an equipment affected by high harmonics is placed (TV set or radio receiver is placed within 1m).
 - Locations where drainage cannot run off safely. It can affect surrounding environment and cause a claim.

- **Take care when carrying the unit by hand.**
If the unit weights more than 20kg, it must be carried by two or more persons. Do not carry by the plastic straps, always use the carry handle when carrying the unit by hand. Use gloves to minimize the risk of cuts by the aluminum fins.
- **Dispose of any packing materials correctly.**
Any remaining packing materials can cause personal injury as it contains nails and wood. And to avoid danger of suffocation, be sure to keep the plastic wrapper away from children and to dispose after tear it up.
- **For installation work, be careful not to get injured with the heat exchanger, piping flare portion or screws etc.**
- **Be sure to insulate the refrigerant pipes so as not to condense the ambient air moisture on them.**
Insufficient insulation can cause condensation, which can lead to moisture damage on the ceiling, floor, furniture and any other valuables.
- **When perform the air conditioner operation (cooling or drying operation) in which ventilator is installed in the room. In this case, using the air conditioner in parallel with the ventilator, there is the possibility that drain water may backflow in accordance with the room lapse into the negative pressure status. Therefore, set up the opening port such as incorporate the air into the room that may appropriate to ventilation (For example: Open the door a little). In addition, just as above, so set up the opening port if the room lapse into negative pressure status due to register of the wind for the high rise apartment etc.**

- **Do not install the unit near the location where leakage of combustible gases can occur.**
If leaked gases accumulate around the unit, it can cause fire.
- **Do not install the unit where corrosive gas (such as sulfurous acid gas etc.) or combustible gas (such as thinner and petroleum gases) can accumulate or collect, or where volatile combustible substances are handled.**
Corrosive gas can cause corrosion of heat exchanger, breakage of plastic parts and etc. And combustible gas can cause fire.
- **Do not use the indoor unit at the place where water splashes may occur such as in laundries.**
Since the indoor unit is not waterproof, it can cause electric shocks and fire.
- **Do not install nor use the system close to the equipment that generates electromagnetic fields or high frequency harmonics.**
Equipment such as inverters, standby generators, medical high frequency equipments and telecommunication equipments can affect the system, and cause malfunctions and breakdowns. The system can also affect medical equipment and telecommunication equipment, and obstruct its function or cause jamming.
- **Do not place any variables which will be damaged by getting wet under the indoor unit.**
When the relative humidity is higher than 80% or drainage pipe is clogged, condensation or drainage water can drop and it can cause the damage of valuables.
- **Do not install the remote control at the direct sunlight.**
It can cause malfunction or deformation of the remote control.
- **Do not use the unit for special purposes such as storing foods, cooling precision instruments and preservation of animals, plants or art.**
It can cause the damage of the items.
- **Do not install the outdoor unit in a location where insects and small animals can inhabit.**
Insects and small animals can enter the electric parts and cause damage or fire. Instruct the user to keep the surroundings clean.
- **Do not use the base flame for outdoor unit which is corroded or damaged due to long periods of operation.**
Using an old and damage base flame can cause the unit falling down and cause personal injury.
- **Do not use any materials other than a fuse with the correct rating in the location where fuses are to be used.**
Connecting the circuit with copper wire or other metal thread can cause unit failure and fire.
- **Do not touch any buttons with wet hands.**
It can cause electric shocks.
- **Do not touch any refrigerant pipes with your hands when the system is in operation.**
During operation the refrigerant pipes become extremely hot or extremely cold depending the operating condition, and it can cause burn injury or frost injury.
- **Do not touch the suction or aluminum fin on the outdoor unit.**
This may cause injury.
- **Do not put anything on the outdoor unit and operating unit.**
This may cause damage the objects or injury due to falling to the object.

Standard accessories (Installation kit) Accessories for indoor unit		Q'ty
①	Installation board (Attached to the rear of the indoor unit)	1
②	Wireless remote control	1
③	Remote control holder	1
④	Tapping screws (for installation board 4dia. by 25mm)	4
⑤	Wood screw (for remote control switch holder 3.5dia. by 16mm)	2
⑥	Battery [R03 (AAA, Micro) 1.5V]	2
⑦	Air-cleaning filters	2
⑧	Filter holders (Attached to the front panel of the indoor unit)	2

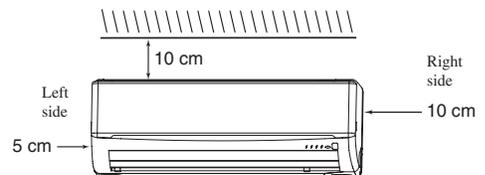
Option parts		Q'ty
Ⓐ	Sealing plate	1
Ⓑ	Sleeve	1
Ⓒ	Inclination plate	1
Ⓓ	Putty	1
Ⓔ	Drain hose (extension hose)	1
Ⓕ	Piping cover (for insulation of connection piping)	1

Necessary tools for the installation work	
1	Plus headed driver (Phillips screwdriver)
2	Knife
3	Saw
4	Tape measure
5	Hammer
6	Spanner wrench
7	Torque wrench (14.0 ~ 62.0N · m (1.4 ~ 6.2kgf · m))
8	Hole core drill (65mm in diameter)
9	Wrench key (Hexagon) [4m/m]
10	Vacuum pump
11	Vacuum pump adapter (Anti-reverse flow type) (Designed specifically for R410A)
12	Gauge manifold (Designed specifically for R410A)
13	Change hose (Designed specifically for R410A)
14	Flaring tool set (Designed specifically for R410A)
15	Gas leak detector (Designed specifically for R410A)
16	Gauge for projection adjustment (Used when flare is made by using conventional flare tool)
17	Pipe bender

Selection of installation location

INDOOR UNIT

- Where there is no obstructions to the air flow and where the cooled air can be evenly distributed.
- A solid place where the unit or the wall will not vibrate.
- A place where there will be enough space for servicing. (Where space mentioned right can be secured)
- Where wiring and the piping work will be easy to conduct.
- The place where receiving part is not exposed to the direct rays of the sun or the strong rays of the street lighting.
- A place where it can be easily drained.
- A place separated at least 1m away from the television or the radio.
(To prevent interference to images and sounds.)

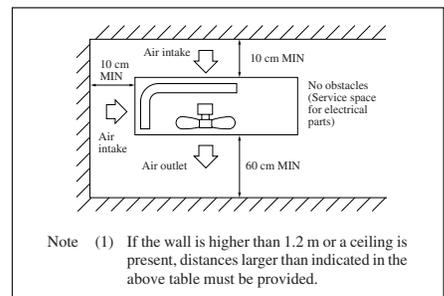


OUTDOOR UNIT

- A place where good air circulation can be obtained and where rain, snow or sunshine will not directly strike the unit.
- A place where discharged hot air or unit's operating sound will not be a nuisance to the neighborhood.
- A place where servicing space can be secured.
- A place where vibration will not be enlarged.

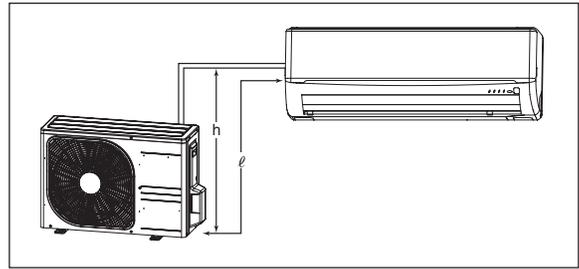
*Avoid installing in the following places.

- A place near the bedroom and the like, so that the operation noise will cause no trouble.
 - A place where there is possibility of flammable gas leakage.
 - A place exposed to strong wind.
- Blowing out port and suction port on the back side of the unit can be installed at a distance of 10cm from walls.
(In case the barrier is 1.2m or above in height, or is overhead, the sufficient space between the unit and wall shall be secured.)
 - When the unit is installed, the space of the following dimension and above shall be secured.



Limitations for one way piping length and vertical height difference

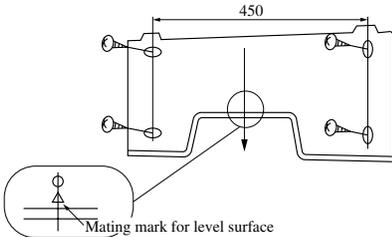
Item	Model	SRK10YL-S SRK13YL-S	SRK18YL-S
Total one way piping length (ℓ)		Max. 15 m	Max. 25 m
Vertical height difference (h)		Max. 10 m	Max. 15 m



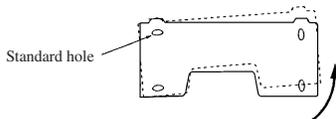
Installation of indoor unit

Installation of installation board

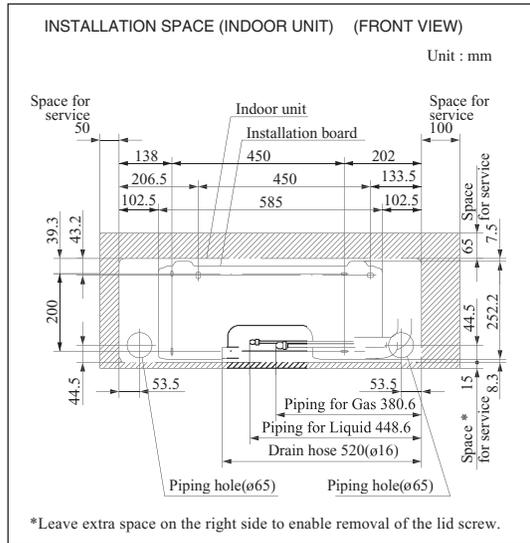
Look for the inside wall structures (Intermediate support or pillar and finally install the unit after level surface has been checked.)



- Adjustment of the installation board in the horizontal direction is to be conducted with four screws in a temporary tightened state.

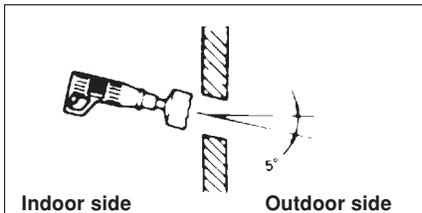


- Adjust so that board will be level by turning the board with the standard hole as the center.



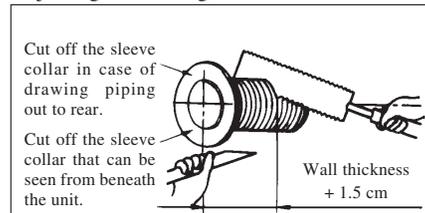
Drilling of holes and fixture sleeve (Option parts)

Drill a hole with ø65 whole core drill



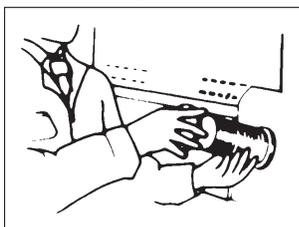
Note (1) Drill a hole with incline of 5 degree from indoor side to outdoor side.

Adjusting sleeve length

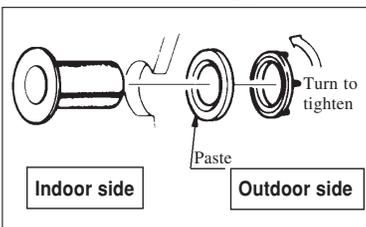


Install the sleeve

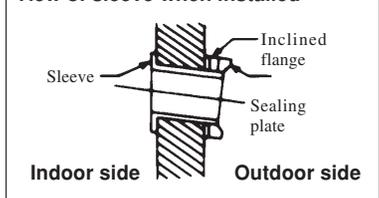
(Inserting sleeve)



(*Sleeve + *Inclined + *Sealing plate)



View of sleeve when installed



Preparation of indoor unit

① Mounting of connecting wires

- a) Remove the lid.
- b) Remove the wiring clamp.
- c) Connect the connecting wire securely to the terminal block.

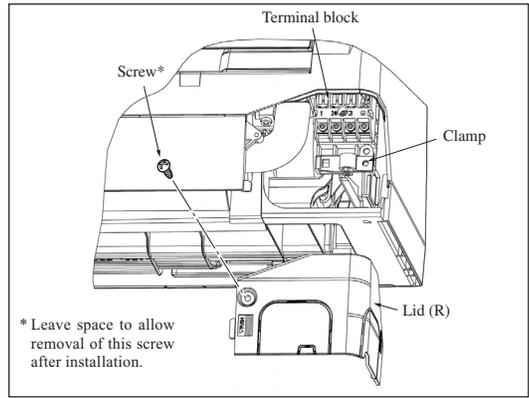
Use cable for interconnection wiring to avoid loosening of the wires.

CENELEC code for cables Required field cables.

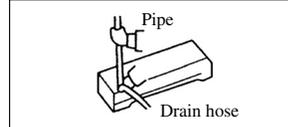
H05RNR3G1.5 (Example) or 245IEC57

- H Harmonized cable type
- 05 300/500 volts
- R Natural-and/or synth. rubber wire insulation
- N Polychloroprene rubber conductors insulation
- R Standed core
- 4or5 Number of conductors
- G One conductor of the cables is the earth conductor (yellow/green)
- 1.5 Section of copper wire (mm²)

- Connect the connection wire securely to the terminal block. If the wire is not affixed completely, contact will be poor, and it is dangerous as the terminal block may heat up and catch fire.
 - Take care not to confuse the terminal numbers for indoor and outdoor connections.
 - Earth lead wire shall be longer than the other lead wires for the electrical safety in case of the slipping out of the cord from the anchorage.
 - The earth line of power cord must be properly earthed.
 - Affix the connection wire using the wiring clamp.
- d) Fix the connecting wire by wiring clamp.
 - e) Attach the lid.
 - f) Close the air inlet panel.

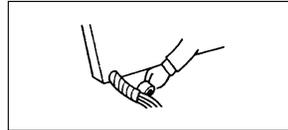


② Shaping the pipe



- Hold the bottom of the pipe and change its direction before stretching it and shaping it.

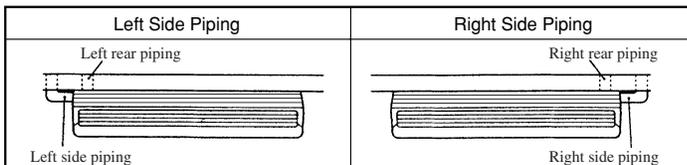
③ Taping of the exterior



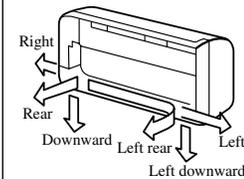
- Tape only the portion that runs through the wall. Always tape the crossover wires with the pipe.

④ Cautions when piping from the left and the rear center of the unit

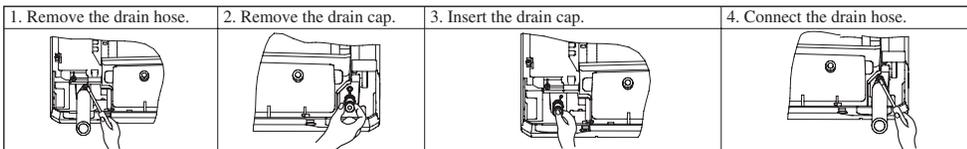
[Top View]



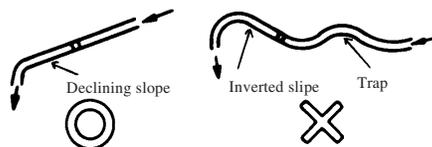
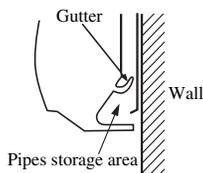
Piping is possible in the rear, left, left rear, left downward, right or downward direction.



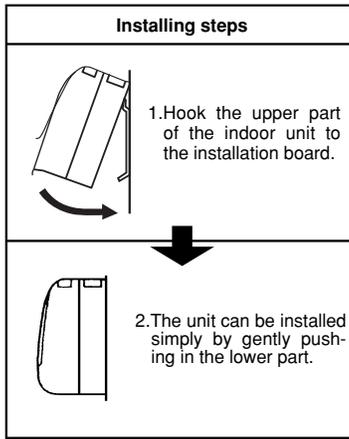
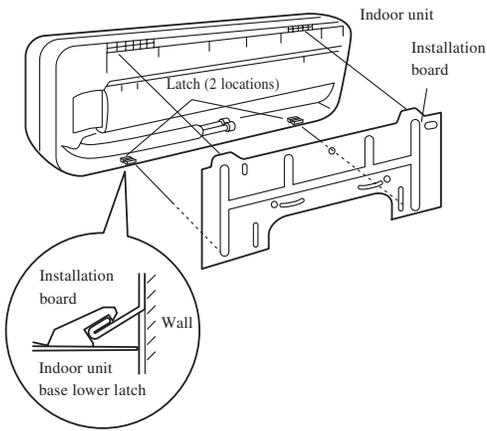
[Drain hose changing procedures]



- Remove the screw and drain hose, making it rotate.
- Remove it with hand or pliers.
- Insert the drain cap which was removed at procedure "2" securely using a hexagonal wrench etc. Note: Be careful that If it is not inserted securely, water leakage may occur.
- Insert the drain hose securely, making rotate. And install the screw. Note: Be careful that If it is not inserted securely, water leakage may occur.
- Do not place the power supply cords above the gutter, because the air conditioner is structured in a way where condensation on the back side is collected in to the drain pan before drainage.
- Do not make traps in the drain hose line.

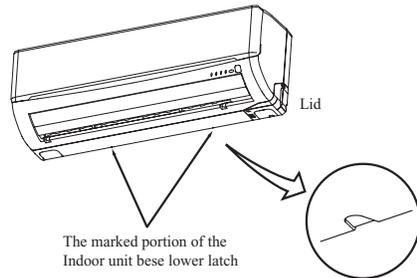


⑤ Securing the indoor unit to the installation board



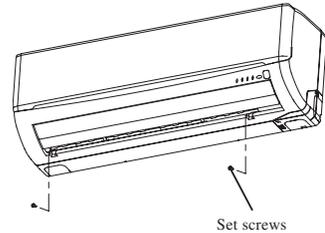
• How to remove the indoor unit from the installation board

- ① Push up at the marked portion of the indoor unit base lower latch, and slightly pull it toward you. (both right and left hand sides)
(The indoor unit base lower latch can be removed from the installation board)
- ② Push up the indoor unit upward. So the indoor unit will be removed from the installation board.



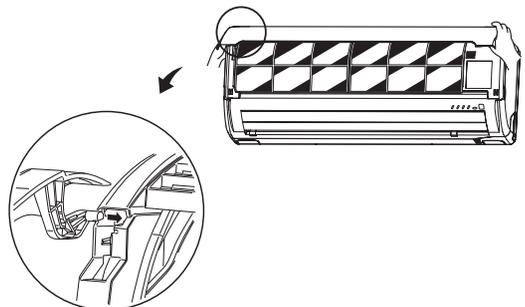
Removal and installation of the front panel

- ① Removing
 - Remove the 2 set screws.
 - Move the lower part of the panel forward and push upwards to remove. (Remove the 3 latches in the upper section.)
- ② Fitting
 - Do remove the air filter.
 - Cover the body with the front panel.
 - Tighten the 2 set screws.
 - Fit the air filter. Carry out in the above order.



Open/close and detachment/attachment of air inlet panel

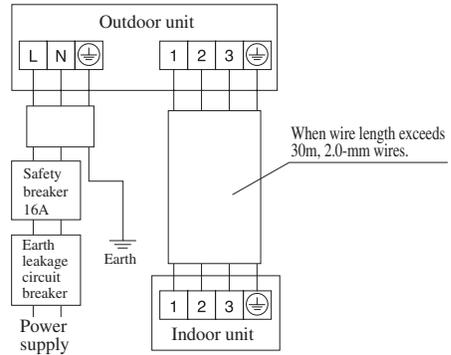
- ① To open, pull the panel at both ends of lower part and release latches, then pull up the panel until you feel resistance. (The air inlet panel stops at approx. 60° open position.)
- ② To close, hold the panel at both ends of lower part to lower downward and push it slightly until the latch works, then push the center portion slightly.
- ③ To remove, pull up the panel to the position shown in right illustration and pull it toward you.
- ④ To install, insert the air inlet panel arm into the slot on the front panel from the position shown in right illustration, hold the panel at both ends of lower part, lower it downward slowly, then push it slightly until the latch works and further push the center portion slightly.



Installation of outdoor unit

- ① Make sure that the unit is stable in installation. Fix the unit to stable base.
- ② When installing the unit at a higher place or where it could be toppled by strong winds, secure the unit firmly with foundation bolts, wire, etc.
- ③ Perform wiring, making wire terminal numbers conform to terminal numbers of indoor unit terminal block.
- ④ Earth lead wire shall be longer than the other lead wires for the electrical safety in case of the slipping out of the cord from the anchorage.
Connect using ground screw located near ⊕ mark.

(POWER SUPPLY CODE)
CENELEC code for cables requiring fields cables.
H05RNR3G2.5



Connection of refrigerant pipings

Preparation

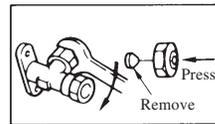
Keep the openings of the pipes covered with tapes etc. to prevent dust, sand, etc. from entering them.

① Indoor unit side

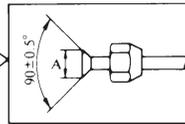


- Remove the flared nuts. (on both liquid and gas sides)

② Outdoor unit side

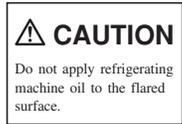


- Remove the flared nuts. (on both liquid and gas sides)

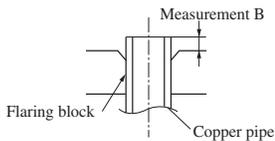


Dimension A	
Liquid side (ø6.35):	9.0 dia
Gas side (ø9.52):	13.0 dia
(ø12.7):	16.2 dia

- Install the removed flared nuts to the pipes to be connected, then flare the pipes.



• Flaring work

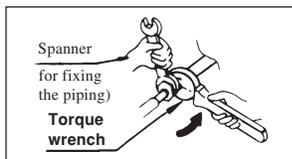


Copper pipe diameter	Measurement B (mm)			Use a flare tool designed for R410A or a conventional flare tool. Please note that measurement B (protrusion from the flaring block) will vary depending on the type of a flare tool in use. If a conventional flare tool is used, please use a copper pipe gauge or a similar instrument to check protrusion so that you can keep measurement B to a correct value.
	Clutch type flare tool f or R410A	Conventional (R22) flare tool		
		Clutch type	Wing nut type	
ø6.35	0.0 ~ 0.5	1.0 ~ 1.5	1.5 ~ 2.0	
ø9.52	0.0 ~ 0.5	1.0 ~ 1.5	1.5 ~ 2.0	
ø12.7	0.0 ~ 0.5	1.0 ~ 1.5	2.0 ~ 2.5	

Connection of refrigerant piping

① Indoor unit side

- Connect firmly gas and liquid side pipings by Torque wrench.

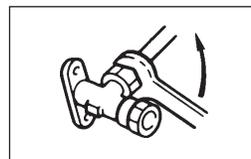


- Specified torquing value:
Liquid side (ø6.35) : 14~18N·m (1.4~1.8kgf·m)
Gas side (ø9.52) : 34~42N·m (3.4~4.2kgf·m)
Gas side (ø12.7) : 49~62N·m (4.9~6.2kgf·m)

- Always use a Torque wrench and back up spanner to tighten the flare nut.

② Outdoor unit side

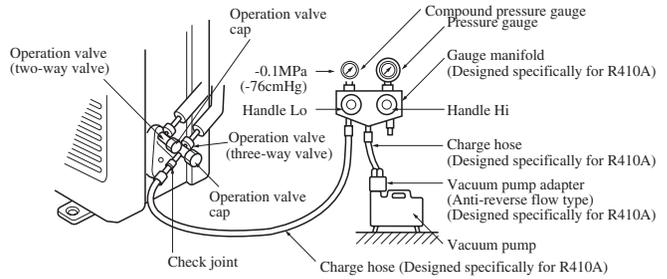
- Connect firmly gas and liquid side pipings by Torque wrench.



- Specified torquing value:
Liquid side (ø6.35) : 14~18N·m (1.4~1.8kgf·m)
Gas side (ø9.52) : 34~42N·m (3.4~4.2kgf·m)
Gas side (ø12.7) : 49~62N·m (4.9~6.2kgf·m)
- Use one more spanner to fix the valve.

Air purge

- ① Tighten all flare nuts in the pipings both indoor and outside wall so as not to cause leak.
- ② Connect service valve, charge hose, manifold valve and vacuum pump as is illustrated below.
- ③ Open manifold valve handle Lo to its full width, and perform vacuum or evacuation. Continue the vacuum or evacuation operation for 15 minutes or more and check to see that the vacuum gauge reads -0.1 MPa (-76 cmHg).
- ④ After completing vacuum operation, fully open service valve (Both gas and liquid sides) with hexagon headed wrench.
- ⑤ Detach the charge hoses.
- ⑥ Check for possible leakage of gas in the connection parts of both indoor and outdoor.



Securely tighten the operation valve cap and the check joint blind nut after adjustment.

Operation valve size (mm)	Operation valve cap tightening torque (N•m)	Check joint blind nut tightening torque (N•m)
$\phi 6.35$ (1/4")	20~30	10~12
$\phi 9.52$ (3/8")		
$\phi 12.7$ (1/2")		

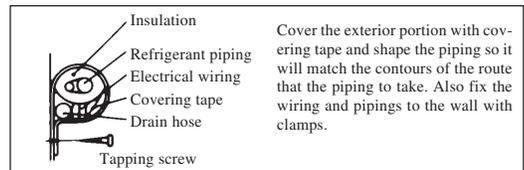
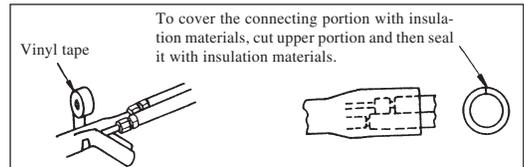
- Since the system uses check joints differing in diameter from those found on the conventional models, a charge hose (for R22) presently in use is not applicable. Please use one designed specifically for R410A.
- Please use an anti-reverse flow type vacuum pump adapter so as to prevent vacuum pump oil from running back into the system. Oil running back into an air-conditioning system may cause the refrigerant cycle to break down.

◆ Additional refrigerant charge

Model	SRK/C10YL-S, 13YL-S	SRK/C18YL-S
Additional refrigerant	Not required	Less than 15m : Not required more than 15m : 20g/m

Insulation of connecting portion

- ① Cover the connection portion of the refrigerant piping with the pipe cover and seal them. If neglecting to do so, moisture occurs on the piping and water will drip out.
- ② Finishing and fixing
 - Ⓐ Tie up the piping with wrapping tape, and shape it so that it conforms to which the pipe is attached.
 - Ⓑ Fix them with clamps as right figure.



How to relocate or dispose of the unit

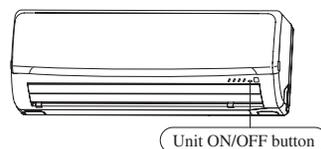
- In order to protect the environment, be sure to pump down (recovery of refrigerant).
- Pump down is the method of recovering refrigerant from the indoor unit to the outdoor unit when the pipes are removed from the unit.

<How to pump down>

- ① Connect charge hose to check joint.
- ② Liquid side : Close the liquid valve with hexagon wrench key.
Gas side : Fully open the gas valve.
Carry out cooling operation. (If indoor temperature is low, operate forced cooling operation.)
- ③ After low pressure gauge become 0.01 MPa , stop cooling operation and close the gas valve.

• Forced cooling operation

Turn on a power supply again after a while after turn off a power supply. Then press continually the ON/OFF button 5 seconds or more.

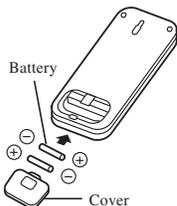


Installation of remote control switch

Mounting method of battery

- Uncover the remote control switch, and mount the batteries [R03(AAA, Micro)×2 pieces] in the body regularly.

(Fit the poles with the indication marks, ⊕ & ⊖ without fail)

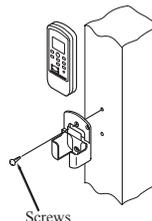


CAUTION

Do not use new and old batteries together.

Fixing to pillar or wall

- Conventionally, operate the wireless remote control by holding in your hand.
- Avoid installing it on a clay wall etc.



Earthing work

- Earth work shall be carried out without fail in order to prevent electric shock and noise generation.
- The connection of the earth cable to the following substances causes dangerous failures, therefore it shall never be done. City water pipe, Town gas pipe, TV antenna, lightning conductor, telephone line, etc.

Trial run and operation

- ① Conduct trial run after confirming that there is no gas leaks.
- ② When conducting trial run set the remote control thermostat to continuous operation position. However when the power source is cut off or when the unit's operation switch is turned off or was turned to fan operation position, the unit will not go into operation in order to protect the compressor.
- ③ Explain to the customer on the correct usage of the air-conditioner in simple layman's terms.
- ④ Make sure that drain flows properly.

Installations test check points

Check the following points again after completion of the installation, and before turning on the power. Conduct a test run again and ensure that the unit operates properly.

At the same time, explain to the customer how to use the unit and how to take care of the unit following the instruction manual.

After installation

- The power supply voltage is correct as the rating.
- No gas leaks from the joints of the operation valve.
- Operation valve is fully open.
- The pipe joints for indoor and outdoor pipes have been insulated.

Test run

- Air conditioning operation is normal.
- No abnormal noise.
- Water drains smoothly.
- Protective functions are not working.
- The remote control is normal.
- Operation of the unit has been explained to the customer.

(Three-minute restart preventive timer)

When the air conditioner is restarted or when changing the operation, the unit will not start operating for approximately 3 minutes. This is to protect the unit and it is not a malfunction.



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