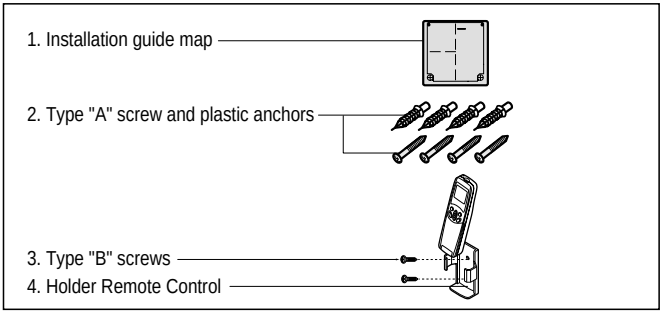
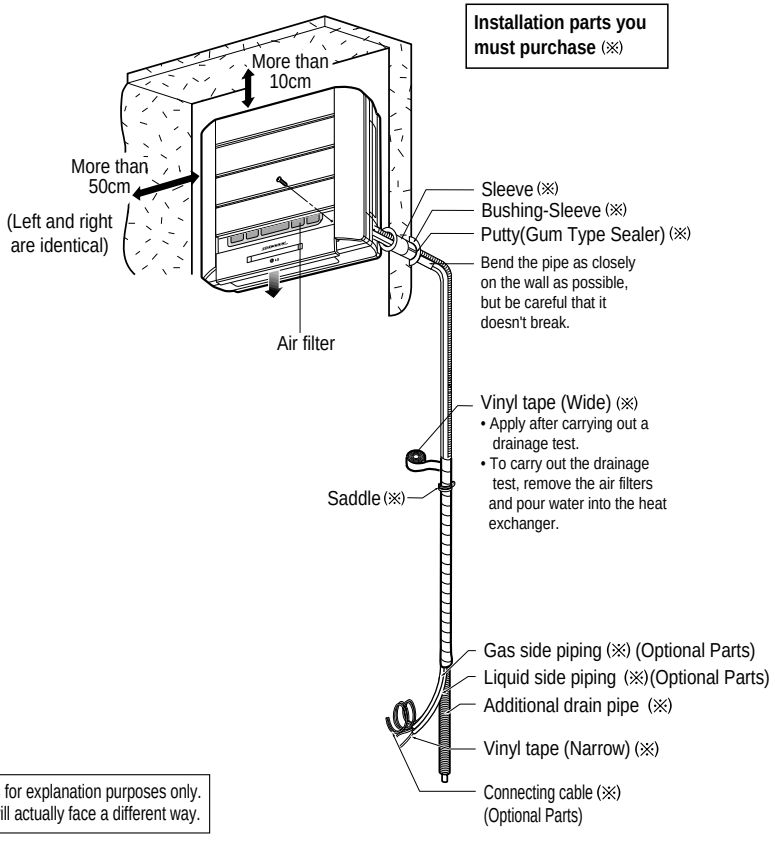
INSTALLATION INSTRUCTIONS
MULTI TYPE ROOM AIR CONDITIONER

- Please read this instruction sheet completely before installing the product.
- When the power cord is damaged, replacement work shall be performed by authorized personnel only.
- Installation work must be performed in accordance with the national wiring standards by authorized personnel only.

Installation Parts Provided





• This illustration is for explanation purposes only. The indoor unit will actually face a different way.

P/No.: 3828A20150K
(SP-Series)

INSTALLATION OVERVIEW

Installation Requirements	Required Parts	Required Tools
The following should be always observed for safety·····3		
Installation of indoor unit·····4	❑ Installation guide map ❑ Four type "A" screws & plastic anchors ❑ Connecting cable	❑ Level gauge ❑ Screw driver ❑ Electric drill ❑ Hole core drill(ø50mm) ❑ Horizontal meter
Flaring work and connection of piping·····7	❑ Pipes: Gas side ·····1/2", 3/8" Liquid side·····1/4" (Refer to page 7) ❑ Insulation materials ❑ Additional drain pipe (Outer Diameter·····15.5mm)	❑ Flaring tool set ❑ Specified torque wrenches 1.8kg.m, 4.2kg.m, 5.5kg.m (different depending on model No.) (Refer to page 7) ❑ Spanner.....Half union
Checking the drainage·····9		❑ A glass of water ❑ Screw driver
Panel Front Assembly ·····10		
Test running ·····11	❑ Two type "B" screws	❑ Owner's manual ❑ Thermometer ❑ Holder Remote Control

THE FOLLOWING SHOULD BE ALWAYS OBSERVED FOR SAFETY

- Be sure to read "THE FOLLOWING SHOULD BE ALWAYS 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.

WARNING	: Could lead to death, serious injury, etc.
CAUTION	: Could lead to serious injury in particular environments when operated incorrectly.

- After reading this instructions, be sure to keep it together with the owner's manual in a handy place on the customer's site.

WARNING

Do not install it yourself (customer).

Incorrect installation could cause injury due to fire, electric shock, the unit falling or leakage of water. Consult the dealer from whom you purchased the unit or special installer.

Perform the installation securely referring to the installation instruction.

Incorrect installation could cause a personal injury due to fire, electric shock, the unit falling or leakage of water.

Install the unit securely in a place which can bear the weight of the unit.

When installed in an insufficiently strong place, the unit could fall causing injury.

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.

Use the specified wires to connect the indoor and outdoor units securely and attach the wires firmly to the terminal board connecting sections so the stress of the wires is not applied to the sections.

Incorrect connection and fixing could cause fire.

Check that the refrigerant gas does not leak after installation is completed.

Attach the electrical part cover to the indoor unit and the service panel to the outdoor unit securely.

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

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 a fire, electric shock, the unit falling, etc.

CAUTION

Do not install the unit in a place where an inflammable gas leaks.

If gas leaks and accumulates in the area surrounding the unit, it could cause an explosion.

Perform the drainage/piping work according to the installation instruction.

If there is a defect in the drainage/piping work, water could leak from the unit and household goods could get wet and be damaged.

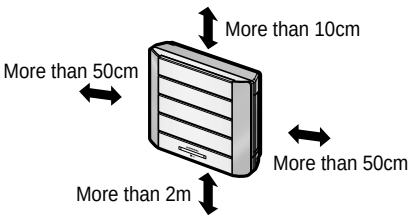
INSTALLATION OF INDOOR UNIT

Read completely, then follow step by step.

1 Select the best location

A ***Indoor unit***

- Do not have any heat or steam near the unit.
- Select a place where there are no obstacles in front of the unit.
- Make sure that condensation drainage can be conveniently routed away.
- Do not install near a doorway.
- Ensure that the space around the left and right of the unit is more than 50cm. The unit should be installed as high on the wall as possible, allowing a minimum of 10cm from ceiling.
- Use a stud finder to locate studs to prevent unnecessary damage to the wall.



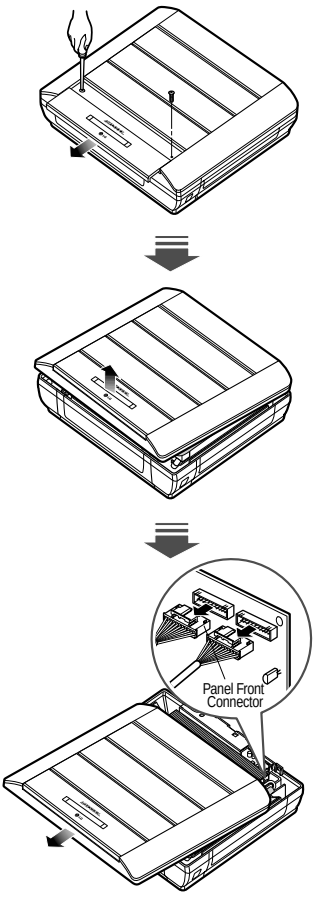
⚠ CAUTION

Install the indoor unit on the wall where the height from the floors more than 2 meters.

2 Preparing work for Installation

A Open panel front

- First,Pull the grille bottom, then remove screws(2 pieces), and close grille bottom again.
- The moment of lifting the both lower parts of panel front, you can hear sound this panel came out, In this time panel front is separated
- After pull down this panel a bit, and separate connecting wire with product.

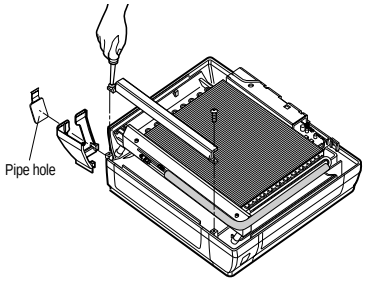


B Cover pipe and cover side remove

- Remove two screws(for fixing cover pipe)
- Pull up the cover side of desired connecting direction, then cover side is separated.
- In case connecting direction is left or right, path through the hole of cover side.

⚠ CAUTION

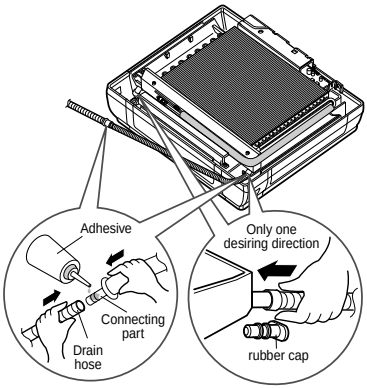
After removing the pipe hole, cut the burr for safety.



When connecting pipe path through rear wall, don't remove the hole.

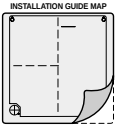
C Drain hose junction

- Remove the rubber stopple of desired drain direction.
- As the following picture, Insert drain hose in the handle of drain pan, and join drain hose and connecting hose.

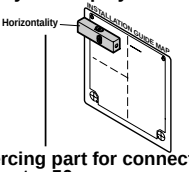


3 Sticking the installation guide map and fixing Indoor unit

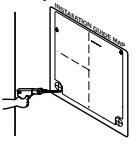
A **Put an Installation Guide Map on the desired surface.**



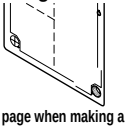
B **Look at suited horizon by horizontal meter on the horizontal setting line, and Fix lightly the map by adhesive tape.**



C **Make a hole with diameter of 6mm and depth of 30-35mm when piercing a screw point.**

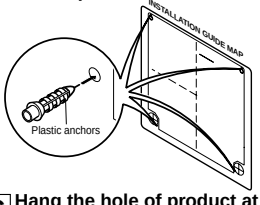


D **Drill the piercing part for connecting pipe as diameter 50mm. (In case of piercing rear surface)**

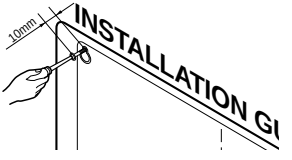


Refer to No. 5 on this page when making a hole in the wa

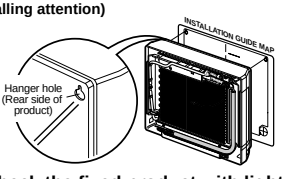
E **Drive the fore plastic anchors into drilled points.**



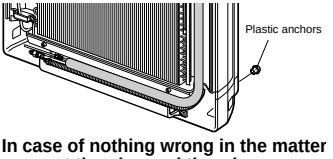
F **First, Drive the two points of the upper parts by screws. (Leave 10mm for hanging product)**



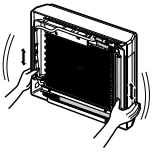
G **Hang the hole of product at the upper screws. (In this time, Remove the map)**
(Falling attention)



H **Drive the lower parts after facing the hole of product with plastic anchors, and fix completely the upper screws.**



I **Check the fixed product with light power.**

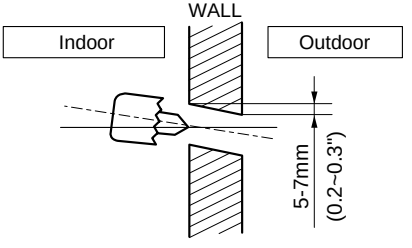


J **In case of nothing wrong in the matter connect the pipe and the wire. (Installation manual reference)**

4 Preparing work for installation

A Drill a hole in the wall

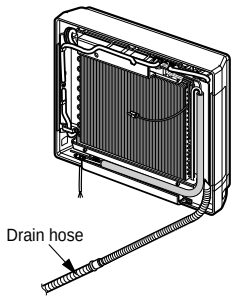
- Drill the piping hole with a ø50mm hole core drill. Drill the piping hole at either the right or the left with the hole slightly slanted to the outdoor side.



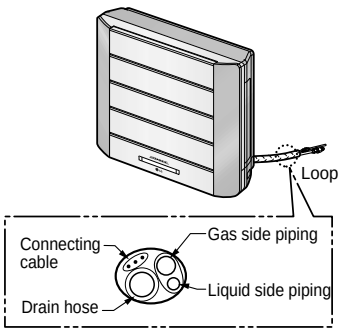
1 Connection of piping -Indoor

■ Preparing the indoor unit's piping and drain hose for installation through the wall.

A ***Route the indoor tubing and the drain hose in the direction of rear left or right***



B ***Tape the tubing, drain hose and the connecting cable. Be sure that the drain hose is located at the lowest side of the bundle. Locating at the upper side can cause drain pan to overflow inside the unit.***

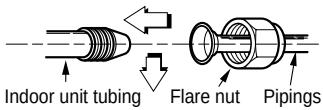


NOTE: If the drain hose is routed inside the room, insulate the hose with an insulation material* so that dripping from "sweating"(condensation) will not damage furniture or floors.

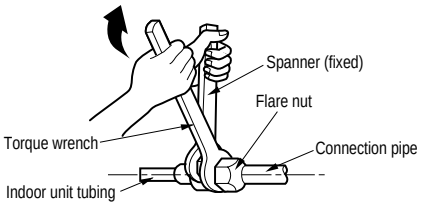
*Foamed polyethylene or equivalent is recommended.

C Connecting the pipings to the in door unit and drain hose to drain pipe

■ Align the center of the pipings and sufficiently tighten the flare nut by hand.

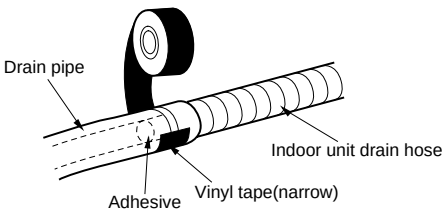


■ Tighten the flare nut with a wrench.



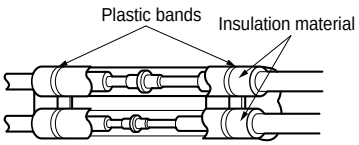
Pipe Size[Torque]	
GAS	LIQUID
3/8"[4.2kg.m]	1/4"[1.8kg.m]
1/2"[5.5kg.m]	1/4"[1.8kg.m]

■ When extending the drain hose at the indoor unit, install the drain pipe.

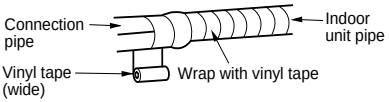


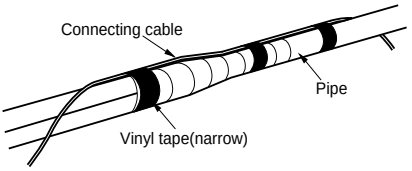
D ***Wrap the insulation material around the connecting portion.***

■ Overlap the connection pipe insulation material and the indoor unit pipe insulation material. Bind them together with vinyl tape so that there is no gap.

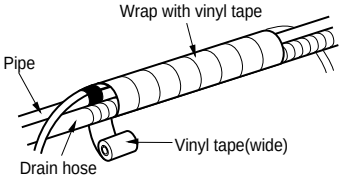


■ Wrap the area which accommodates the rear piping housing section with vinyl tape.





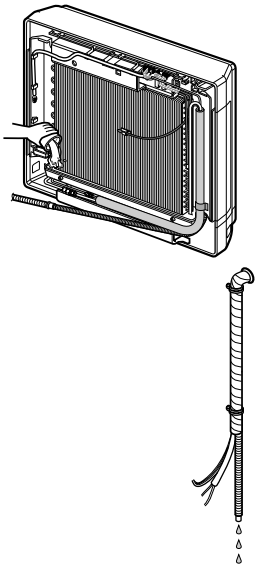
■ Bundle the piping and drain hose together by wrapping them with vinyl tape over the range within which they fit into the rear piping housing section.



Checking the drainage

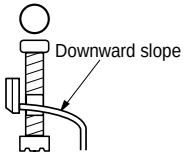
A ***To check the drainage.***

- Pour a glass of water on the evaporator.
- Ensure the water flows through the drain hose of the indoor unit without any leakage and goes out the drain exit.

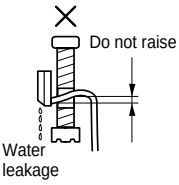


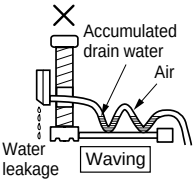
B ***Drain piping***

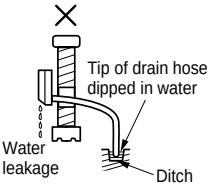
- The drain hose should point downward for easy drain flow.

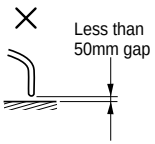


- Do not make drain piping.



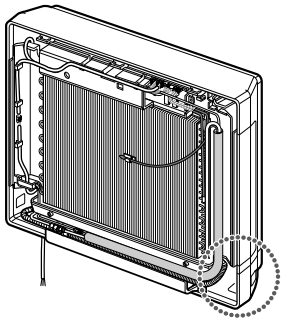




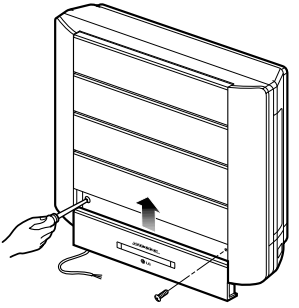


PANEL FRONT ASSEMBLY

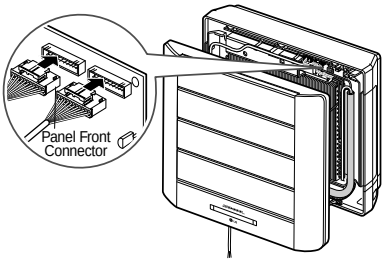
A First, Check the side cover assembly exactly, Fix power cord in the bottom groove of cover side left.



C Drive two screws.

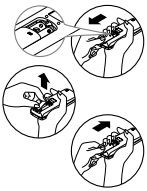


B Assemble connecting lead wire with controller and first fix the upper part of panel front, then match the lower part of panel front



1. *Check that all tubing and wiring have been properly connected.*
2. *Check that the gas and liquid side service valves are fully open.*

A ***Prepare remote control***



1. Remove the battery cover by pulling it according to the arrow direction.
2. Insert new batteries making sure that the (+) and (–) of battery are installed correctly.
3. Reattach the cover by pushing it back into position.

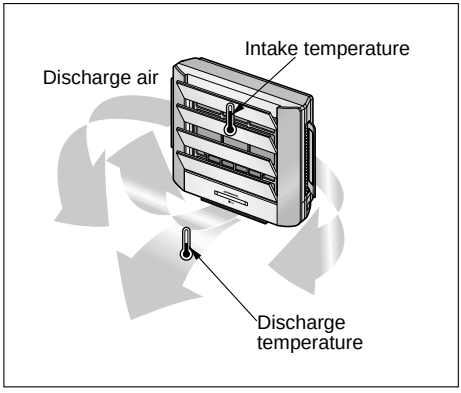
NOTE:

- *Use 2 AAA(1.5volt) batteries. Do not use rechargeable batteries.*
- *Remove the batteries from the remote control if the system is not going to be used for a long time.*

B ***Evaluation of the performance***

Operate unit for 15~20 minutes, then check the system refrigerant charge:

1. *Measure the pressure of the gas side service valve.*
2. *Measure the temperature of the intake and discharge of air.*
3. *Ensure the difference between the intake temperature and the discharge is more than 8°C*



MEMO

INSTALLATION GUIDE MAP
SAGOMA PER L'INSTALLAZIONE
MAPA GUÍA DE INSTALACIÓN
CARTE EE GUIDE D'INSTALLATION
INSTALLATIONSANLEITUNGSKARTE

•Drilling Point
•Punto in cui praticare il foro
•Punto de perforación
•Poign de forage
•Bohrpunkt

•Horizontal Setting Line
•Punto per il Fissaggio del livello orizzontale
•Punto de Fijación Horizontal
•Poing de réglage
•Horizontal-Einstellungspunkt

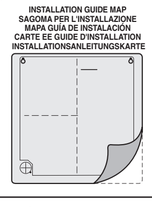
•Drilling Point
•Punto in cui praticare il foro
•Punto de perforación
•Poign de forage
•Bohrpunkt

•Installation process •Processo di Installazione •Proceso de la Instalación •Processus d'Installation •Installationsprozess

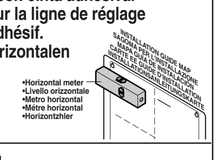
•Product out line
•Prodotto disallineato
•Contorno del producto
•Profil de produit
•Aussenlinie produkt

•Product Bottom line
•Linea di fondo del prodotto
•Línea de fondo del producto
•Derniére ligne de produit
•Grundlinie produkt

1 •Put an Installation Guide Mapon the desired surface.
•Posizionare la sagoma per l'installazione sulla superficie desiderata.
•Ponga la planilla guía de instalación sobre la superficie que desea.
•Mettez la carte de guide d'installation sur la surface désirée.
•Setzen Sie eine Installationsanleitungkarte auf die gewünschte Oberfläche.



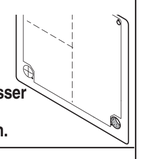
2 •Look at suited horizon by horizontal meter on the horizontal setting line, and Fix lighty the map by adhesive tape.
•Fissare la linea per il piano necessario utilizzando una livella, fissando la sagoma con nastro adesivo.
•Mire el horizonte que concuerde con el medidor horizontal sobre la línea de montaje horizontal y asegure suavem ente la planilla con cinta adhesiva.
•Regardez l'horizon convenu par le métre horizontal sur la ligne de réglage horizontale et fixez légèrement la carte par le ruban adhésif.
•Betrachten Sie mittels des Horizontzählers auf der horizontalen Einstellungslinie geeigneten Horizont, und fixieren Sie leicht mittels Klebstreifens die Karte.



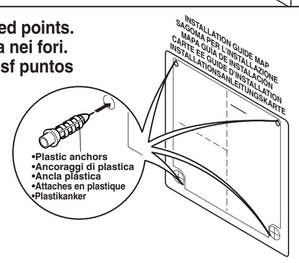
3 •Make a hole diameter of 6mm and depth of 30-35mm when poring a screw point.
•Praticare un foro del diametro di 60mm e una profonditá di 30-35 con la punta della vite.
•Haga un hoyo con un diámetro de 60mm y profundidad de 30-35mm al escudriñar un punto de tornillo. (cuatro puntos)
•Faites un trou avec le diamétre de 6mm et la profondeur de 30-35mm en regardant un point de vis.(quatre points)
•Bilden Sie eine Bohrung mit Durchmesser von 6mm und Tiefe von 30-35mm, wenn Sie eine Pore eines Schraubenpunktes bilden (vier Punkte).



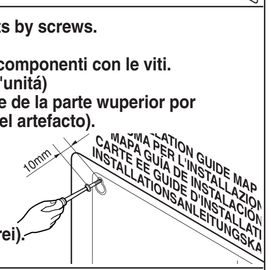
4 •Refer to No.5 on page 7 when making a hole in the wall.
•Praticare un foro per il tubo di collegamento con diametro di 50mm(bel caso si pratichi sulla superficie posteriore)Controllare il punto 5 della pagina quando si pratica un foro nel muro.
•Perfore los partes indicadas para conectar las cañerías con un diámetro de 50mm (en el caso de perforar la superficie posterior).
Refiérase al No,5 en la página 6 ai hacer un hoyo en la pared.
•Forez la pice de perforation pour le tuyau de liaison comme diamétre de 50mm(en cas de la surface d'arriére de perforation).
Référez-vous á No.5 á la page 6 en faisant un trou dans le mur.
•Bohren Sie das Durchstossteil für Verbindungsrohr mit Durchmesser 50mm(bei der Oberfläche hinter dem Druchstossteil).
Siehe No.5 auf Seite 6, wenn Sie eine Bohrung an der Wand bilden.



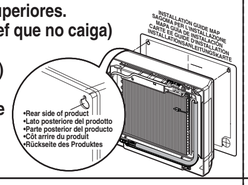
5 •Drive the fore plastic anchors into drilled points.
•Inserire di quattro ancoraggi di plastica nei fori.
•Atornille las cuatro anclas dentro de losf puntos taladrados.
•Pilotez les attaches antérieurs en plastique dans les points forés.
•Treiben Sie die vier Plastikanker in gebohrte Punkte.



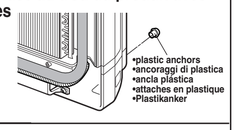
6 •First, Drive the two points of the upper parts by screws.
(Leave 10mm for hanging product)
•Per prima cosa inserire due punte dei due componenti con le viti.
(Lasciare 10mm di spazio per appendered l'unitá)
•Primero, asegure los dos puntos de la parte de la parte wuperior por medio de tornillos.(Deje 10mm para colgar el artefacto).
•D'abord, pilotez les deux points des piéces supérieures par les vis.
(Laissez 10mm pour le produit suspendu)
•Zuerst treiben Sie mittels Schrauben die zwei Punkte der oberen Teile
(lassen Sie 10mm für hängendes Produkt frei).



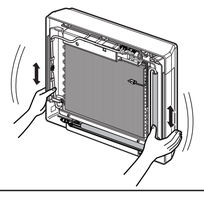
7 •Hang the hole of product at the upper screws. (In this time, Remove the map)
(Falling attention)
•Appendere l'unitá con le viti superiori(a questo punto rimuovere la sagoma)
(attenzione al pericolo di cadute)
•Cuelgue el orificio de la unidad de los tornillos superiores.
(En esta oportunidad, quite la planilla guía) (Cuidef que no caiga)
•Attachez le trou du produit aux vis supérieures.
(Dans ce cas, retirez la carte) (Attention en chute.)
•Hängen Sie die Bohrung des Produktes auf die oberen Schrauben (in diesem Fall, löschen Sie die Karte) (falling attention)
(Vorsichtig, damit nicht fällt)



8 •Drive the lower parts after facing the hole of product with plasticanchors, and fix completely the upper screws.
•Inserire le due parti inferiori dopo avere presentato gli ancoraggi di plastica con i fori, e fissare completamented le viti superiori
•Asegure la parte inferior después de enfrentar el orificio de la unidad a los anclajes plásticos y asegure completamente los tornillos superioresa.
•Pilotez les parties plus inférieures aprés avoir fait face au trou du produit avec les attaches en plastique, et fixez complétement les vis supérieures.
•Treiben Sie die unteren Teile, nachdem Sie die Bohrung des Produktes mit Plastikankern gegenübergestellt haben, und befestigen Sie vollständig die oberen Schrauben.



9 •Check the fixed product with light power.
•Controllare l'unità installata a bassa potenza.
•Compruebe la unidad fijada con energía eléctrica.
•Contrôlez le produit fixé avec la puissance légére.
•Überprüfen Sie mit der Lichtleistung das rtlich festgelegte Produkt.



10 •In case of nothing wrong in the matter, connect the pipe and the wire.
(Installation manual reference)
•Nel caso l'installazione sia riuscita, connettere il tubo ed filo.
(Riferimento nel manuale di installazione)
•En caso de que no gaya nada fallado en el material, conecte la cañería y los cables. (Referenciasf en el Manual de instalación)
•En cas de rien mal dans la matiére, connectez le tuyau et le fil.
(référence manuelle d'installation)
•Falls von nichts falsch im Stoff, schliessen Sie das Rohr und die Leitung an (Installationshandbuch sehen).

•Pipe Hole in Piercing Surface Work Position (Left Pipe)
•Foro per il tubo nella superificie Posizione di lavoro(tubo di sinistra)
•Hoyo del tubo en la superficie de la perforación Posición del trabajo(Tubo izquierdo)
•Trou de Tuyau dans la Surface de Perforation Position de Travail(Tuyau á gauche)
•Rohrbohrung auf durchstossoberfläche Arbeitsstellung(Rohr links)

•Pipe Hole in Piercing Surface Work Position (Right Pipe)
•Foro per il tubo nella superificie Posizione di lavoro(tubo di destra)
•Hoyo del tubo en la superficie de la perforación Posición del trabajo(Tubo derecho)
•Trou de Tuyau dans la Surface de Perforation Position de Travail(Tuyau á droite)
•Rohrbohrung auf durchstossoberfläche Arbeitsstellung(Rohr rechts)

•Drilling Point
•Punto in cui praticare il foro
•Punto de perforación
•Poign de forage
•Bohrpunkt

•Horizontal Setting Line
•Punto per il Fissaggio del livello orizzontale
•Punto de Fijación Horizontal
•Poing de réglage
•Horizontal-Einstellungspunkt

•Drilling Point
•Punto in cui praticare il foro
•Punto de perforación
•Poign de forage
•Bohrpunkt

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