SOLAR AIR-CONDITIONER

OPERATION AND INSTALLATION INSTRUCTIONS



TKF(R)-26GW/BP	(9000BTU)
TKF(R)-35GW/BP	(12000BTU)
TKF(R)-50GW/BP	(18000BTU)
TKF(R)-70GW/BP	(24000BTU)
TKF(R)-100GW/BP	(36000BTU)
TKF(R)-120GW/BP	(41000BTU)
TKF(R)-140GW/BP	(48000BTU)

To use this unit correctly and safely, be sure to read this instruction manual before use and installation.

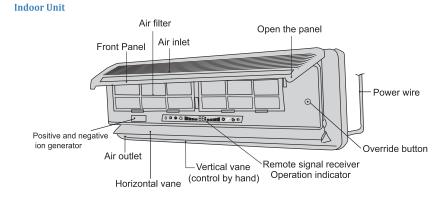
Table of Contents

Safety Precautions

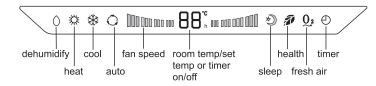
Safety Precautions	Page 3	Before using the unit carefully read these 'Safety Precautions' for safety purposes.
Parts Description	Page 3	WARNING
Indoor Unit	Page 4 Page 4	
Outdoor Unit	Page 4 Page 5	Do not connect using double adopter or an extension cord and do not attach multiple loads to or
Remote Control Buttons and Functions	Page 6	electrical outlet.
Set Remote Control Clock	Page 6	electrical outlet.
Operate Automatically	Page 7	Do not use the unit if the power cord has been severed or damaged. Do not attempt to repair an
Remote Control Operation	Page 7	
To Start Operation	Page 7	damage to the power cord.
To Stop Operation	Page 7	Do not forcibly pull the power cord
To Select Cool, DRY, HEATFA N and ON/OFF Mode	Page 7	
Change the Set Temperature	Page 7	Do not operate switches with wet hands.
In HEAT Operation	Page 7	
In DRY Operation	Page 8	Do not leave on installation stand which is damaged.
Air Flow Velocity and Direction Adjustment	Page 8	
To Set Timer on Function	Page 8	Do not clean the air conditioner with water.
To Set the Timer Off Function	Page 8	
Set the Comfortable Sleep Mode Function	Page 8	Do not place a pet or house plant in the airflow from the air conditioner.
Sleep Function	Page 9	Do not apply an incertified or flammable approximation or accepted unit
To Cancel the Sleep Function	Page 9	Do not apply an insecticide or flammable spray on or near the unit.
'e' button Function	Page 9	Do not operate for extended periods in high humidity e.g. leaving a window or door open.
Operation and Maintenance	Page 10	Do not operate for extended periods in high furnitury e.g. reaving a window of door open.
Efficient Operation	Page 10	Do not step on the outdoor unit. Do not put anything on top of the outdoor unit.
For Effective Cooling	Page 10	
Maintenance While in Use	Page 10	Do not install the unit where flammable gas could leak. If gas leaks and collects around the unit it
When the Air Conditioner is not going to be used in a long time	Page 10	
Preparation & Maintenance when the air conditioner is to be used again	Page 10	cause anexplosion.
Before Contacting the Serviceman	Page 11	Do not put your finger or other objects into the air outlet of the outdoor unit. It is very dangerou
Cleaning of the Air Filter and Deodorising Filter	Page 12	, , , , , , , , , , , , , , , , , , , ,
Cleaning the air filter every 2 weeks	Page 12	Drain water should be fully drained if the drainer route is incomplete water may drop from the u
Cleaning & replacement of the deodorizing filter (optional)	Page 12	
Air Filter Replacement (Optional)	Page 12	damage furniture or carpet.
Safety Rules	Page 13	When the unit is not going to be used for an extended period of time disconnect the power supp
When you think that trouble has occurred	Page 14	
Solar Assisted Air-Conditioner Installation Pictures	Page 15	When applying grounding do not connect the earth wire to a gas pipe or water pipe etc.
Installing the Indoor Unit	Page 15	
Installing the Outdoor Unit and Piping Connection	Page 17	When an abnormality (smell of burning etc.) occurs, stop the unit and disconnect the power plug
Installing the outdoor Unit	Page 17	the breaker.
Piping Connection	Page 17	
Outdoor Unit refrigerant Piping Connection	Page 17	Disconnect the power supply or turn off breaker before cleaning the indoor unit.
Remove the air in the indoor unit and piping	Page 18	
Leakage Detecting	Page 18	
Draining Piping Work	Page 18	
Sealing of the Wall Hole & Fixing of the Piping	Page 19	
Electric Wiring Connection & Trial Operation	Page 20	
Electric Wiring Connection	Page 20	
Trial Operation	Page 20	
Electronic Diagram	Page 21	

t using double adopter or an extension cord and do not attach multiple loads to one
t.
unit if the power cord has been severed or damaged. Do not attempt to repair any
power cord.
/ pull the power cord
e switches with wet hands.
n installation stand which is damaged.
e air conditioner with water.
pet or house plant in the airflow from the air conditioner.
n insecticide or flammable spray on or near the unit.
for extended periods in high humidity e.g. leaving a window or door open.
the outdoor unit. Do not put anything on top of the outdoor unit.
he unit where flammable gas could leak. If gas leaks and collects around the unit it may
ion.
r finger or other objects into the air outlet of the outdoor unit. It is very dangerous.
ould be fully drained if the drainer route is incomplete water may drop from the unit. It may
ure or carpet.
is not going to be used for an extended period of time disconnect the power supply.
g grounding do not connect the earth wire to a gas pipe or water pipe etc.
rmality (smell of burning etc.) occurs, stop the unit and disconnect the power plug or turn off
e power supply or turn off breaker before cleaning the indoor unit.

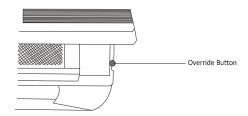
Parts Description



PANEL DISPLAY OF THE INDOOR UNIT



When the Front Panel is Open

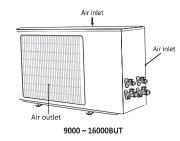


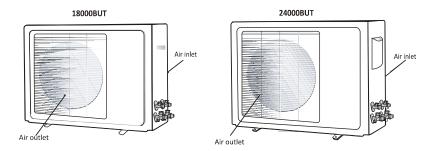
Display details on the indoor unit

- Display section of the indoor unit has a timer and operation signal lamps.
- Setting TIMER ON or TIMER OFF lights the ti mer lamp.
- When the unit is turned on The operational signal lamp 'RUN' lights up
- When the operational signal lamp 'RUN' flashesth e air condition er mayhave malfunction.

Outdoor Unit

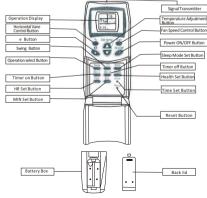






Actual unit may be slightly different in appearance from the above illustratons.

Remote Control Buttons and Functions



Set Remote Control Clock

1. Remove the back lid and insert two batteries



Do not comfuse(+)and(-)

2. Press the reset button. Press it with a sharp object i.e. a pin



Press it bysharp object

3. Press the Clock Set Button. Press it with a sharp object i.e. a pin



Press it by sharp object

4. Press the buttons HOUR and MIN to set the current time. Each press of the button adds either an hour or a minute.



5. Press the clock set button again. Press it with a sharp object i.e. a pin



Press it by sharp object

WARNING

- The batteries must be removed from the appliance before it is scrapped and ensure that they are correctly disposed of.
- The range that the signal can reach is about 6 meter. One or two beeps will be heard after the unit received the signal.
- When the signal does not operate the indoor unit or the display becomes dim, replace the 2 batteries with new ones of the same type.
- Use the remote control carefully. If it is dropped, thrown or gets wet it may not operate.
- Do not use rechargeable batteries.

Operate Automatically

According to the room temperature when the operation starts, the operation mode is automatically selected between **COOL**, **DRY** and **HEAT**. However, when operation is started again within 2 hours after the operation is stopped, the same operation mode being used previously is selected.

Room Temperature when Started	Operation Mode
About 25°C or higher	COOL
About 20°C to 25°C	DRY
About 20℃ or lower	HEAT FAN

Remote Control Operation

To Start Operation

- 1. The signal transmitter section of the remote control should be pointed at the receiving section of the indoor unit
- 2. Press the ON/OFF button to start the air conditioner.
- 3. To select AUTO mode, press the Operation select button. Each time the button is pressed the mode will change in the following sequence AUTO COOL * DRY OHEAT *.

To Stop Operation

1. Press the ON/OFF button to stop the air conditioner

To select 'COOL', 'DRY', 'HEAT', 'FAN' and 'ON/OFF' Mode

- 1. Press the ON/OFF button to start the air conditioner.
- 2. To select AUTO mode, press the Operation select button. Each time the button is pressed the mode will change in the following sequence AUTO COL * DRY OHEAT * .For Example to select COOL *, operation mode press MODE button continuously until COOL is displayed on the screen.
- 3. Press the FAN button to select the fan speed
- 4. Press the button to select air blowing direction
- 5. Press the ON/OFF button to stop the machine.

PLEASE NOTE: Once the Operation mode has been selected, the same operation mode will start when the machine is turned back on.

Change the Set Temperature

To lower the temperature, press the \square button. One press will lower the temperature by 1 °C.

To raise the temperature, press the ∇ button. One press will raise the temperature by 1 °C.

In HEAT Operation

- 1. The air conditioners efficiency is relative to the outdoor temperature. If the unit is used in a cold region, a heater can be used in conjunction with the air conditioner to assist with heating.
- Defrosting operation. When outdoor temperature is very low, the fans in the outdoor unit and indoor unit are stopped, to allow the defrosting operation to take place. Defrosting operation takes between 2 - 10 minutes and protects the outdoor heat - exchange from being frosted

In DRY Operation

- 1. The DRY mode should be used to reduce the humidity of the room
- 2. In DRY operation, the fan speed cannot be changed. There will be a 3 minute delay until fans start.
- 3. The fans in the outdoor and indoor unites are controlled by the microprocessor and the fans will operate occasionally in DRY operation.
- 4. The room temperature is slightly lowered in the DRY mode. This mode cannot be used when the current room temperature is 13 °C Or lower.
- 5. In order to reduce stress on the compressor, the unit cannot be operated for 3 minutes after either a power failure or the DRY operation is stopped.

Air Flow Velocity and Direction Adjustment

- 1. Press the FAN button to adjust the velocity of the air flow. Each time the button is pressed the fan speed is changed as follows. AUTO ⇒ LOW ⇒ MEDIUM ⇒ HIGH
- 2. To adjust the direction of the air flow press the HORIZONTAL VANE CONTROL button . Each time the button is pressed the horizontal vanes will change position from

3. When COOL or DRY mode has been selected the most effective Position of the horizontal vanes is wither

- or / and when HEAT mode is selected the most effective positions are / and .

4. Once the desired room temperature has been reached the swing mode ∇ should be selected.

PLEASE NOTE: To change the horizontal air flow direction adjust the vertical vanes manually before operation starts as the horizontal vanes can move automatically and your fingers may get caught.

To Set Timer on Function

- 1. The unit must be off when you begin setting the TIMER on function.
- 2. Press the TIMER ON button 📛 and the O-I will flash on the screen.
- 3. When the icon flashes the start timer can be set. Press the HOUR and Minute buttons to adjust the required time.
- 4. Once the start time has been set, press the Set Temp button to send the Timer On setting to the unit.
- 5. To cancel the operation press the Timer ON button 📛 again.

To Set the Timer Off Function

- 1. The unitmust be on when you begin setting the TIMER OFF function.
- 2. Press the TIMER OFF button 🚔 and the 🛛 🔍 will flash on the screen.
- 3. When the icon flashes the finish time can be set by pressing the Hour and Minute Buttons to adjust the time required.
- 4. Once the finishtime has been set press the Set Temp button to send the Timer Off setting to the unit.
- 5. To Cancel the operation press the Set Temp Button to send the TIMER OFF Setting to the unit.
- 6. To cancel the operation press the TIMER OFF Button 🖮 again.

Set the Comfortable Sleep Mode Function

- 1. Ensure the machine is on
- 2. Press the Sleep Button 🕮 to start the sleep mode function.

Sleep Function

- 1. The indoor fan motor changes to a low speed
- 2. In cool operation mode each hour the temperature will raise by 1° (max 2°)
- 3. In heat operation mode each hour the temperature will raise by $1^{\circ}(\max 2^{\circ})$
- 4. In dry operation the temperature will not change.

To Cancel the Sleep Function

You can cancel the sleep function mode by selecting one of the below methods:

- 1. Press the Sleep Button 🕮 again
- 2. Press the ON/OFF Button
- 3. Press the Mode Button
- 4. Press the Fan Button to change the fan speed.

<u>'e'Button Function</u>

- 1. Press the 'e' Button once the unit goes into AUTO function mode which will adjust the fan speed swing function and mode settings automatically.
- 2. To cancel this function press the Mode Button.

Operation and Maintenance

Efficient Operation

In order to increase the efficiency of the operation and considering your health we recommend you use the unit as follows.

For Effective Cooling

Close the windows and pull down blinds. Sunshine is reduced and cooling efficiency increases. Paste heat shield film on the window. Heat entering the room is reduced. Block the outdoor unit from direct sunlight. This saves energy.

Maintenance While in Use

The unit should be cleaned regularly Turn off the power supply before cleaning Clean the indoor unit using a soft cloth. If the unit is very dirty use a solution of detergent in lukewarm water then clean it again using a soft damp cloth. Clean the air filter regularly (Refer to the section of 'leaning the air Filter') If the outdoor unit is installed on the roof, Clean the surroundings around the outdoor unit regularly to prevent dirt or rubbish from blocking the heat exchanger.

When the Air Conditioner is not going to be used for a long time

Perform FAN operation for 3-4 hours to dry the inside of the air conditioner. Remove the batteries from the remote control Disconnect the power plug or switch off at the mains power.

Preparation and maintenance when the air conditioner is to be used again

Clean the air filter and install ir in the indoor unit. Connect the power plug or switch on at the mains power Check that the air inlet and outlet of the indoor/outdoor units are not blocked.

CAUTION

Do not operate the air conditioner without the air filter installed. Do not use gasoline benzene, polish powder, detergent or hot water more than 40° C

Before Contacting the Serviceman

If the air conditioner cannot be operated ensure:

- 1. The power plug is connected. The switch is turned on and the fuse is not blown
- 2. The leakage breaker is not turned off
- 3. The power source is current
- 4. The air conditioner keeps stoping during operation. Test the power by pressing the ON/OFF button again
- 5. The ON timer is not set.

The air conditioner does not cool or heat sufficiently. Check

- 1. The temperature setting is correct. The set temperature should be lower than the room temperature in COOL mode. While in heat mode the set temperature should be higher than room temperature.
- 2. If a door is open or there are too many people in a room or other electronic appliances are generating heat from operating.
- 3. Outlet and inlets of the outdoor unit are not blocked
- 4. Air filter is not dirty.

Display on remote control does not appear or the remote control signal cannot be received. Check

- 1. The batteries are exhausted
- 2. The polarity (+) (-) of the batteries is confused.

CAUTION

During a thunderstorm stop operation and pull out the power plug or turn off the mains switch as damage maybe caused to the electrical parts.

In a weak radio wave area when the air conditioner is operated it may cause noise in SW radio reception. The remote control signal may not be received in a room where an electronic type fluorescent lamp is used.

If the above items are checked and the air condition does not recover stop using and contact the service dealer or the manufacturer advising the producttype and the failure details.

Cleaning of the Air Filter and Deodorising Filter

Cleaning the air filter every 2 weeks

1. Open the front panel to the position as shown and remove the air filter (The position of the front panel should not be opened to a horizontal level. As it will damage the hinge causing the front panel to drop down).

2. Clean the dirt form the air filter using a vacuum cleaner or by washing it with water. If dirt is difficult to remove wash with a solution of detergent in lukewarm Water(Below 40 $^{\circ}$ C).

3.Dry well in the shade after washing. Do not expose the air filter to direct sunlight or heat from fire when drying.

4.Install the air filter and close the front panel.

Cleaning and replacement of the deodorizing filter (option)

Clean about once every 2 weeks and replace every year.

- 1. Remove the air filter then remove the deodorizing filter (Grev sponge type).
- Soak the deodorizing filter together with the frame in lukewarm water for about 15 minute. If dirt is difficult to remove use a solution of detergent in lukewarm water. Drv well in the shade.

CAUTION

- The deodorizing filter is harmless to humans, however to keep its effect be sure to hold the frame and not touch the surface of the filter with your hands.
- Do not use a scrubbing brush or sponge. It may damage the surface of the filter.
- Do not use a chlorine detergent.
- 3. Install the deodorizing filter (grey sponge type) then install the air filter.

Air filter replacement (option)

Replace about every 6 months. Refer to the section **'Deodorizing filter replacement'**. Remove the air filter then remove the air deodorizing filter. Install the new air filter first then install the deodorizing filter.

Deodorizing filter and air filter

Remove it

Open the Front Panel and Remove and Replace the Air

Filter

Remove it

Install it

Install it



- If the air filter is blocked it may cause condensation in the air outlet due to the reducing of the cleaning capacity.
- The air filter is disposable. If the colour of the cleaning filter turns to brown replace it with a new one. (Customers can buy these filters in stores).
- If the colour of the deodorizing filter is not restored even after washing follow the procedure above or if the deodorizing filter becomes brown replace.
- The deodorizing filter and the air filter used in this series of products are interchangeable with others used in similar products (optional).

Safety Rules

Before installing the unit, carefully read these 'safety rules'

Cautionary items shown here are very important. Be sure to observe them.

- The purch aser must not install the unit by themselves. It may cause fire, electric shock, injury by dropping and water leakage for incorrect installation.
- Installation must be done according to the installation instructions an dby an authorised operator.
- Connect the indoor and outdoor unit using fixed standard cord.
- Drainage piping and refrigerant piping connection are referred to in the installation instructions.
- After installation check for nay refrigerant leakage.
- Do not connect using branched outlet or an extension cord and do not attach other loads to the one electric outlet.
- Install the unit in a place which will support the weight.
- Apply grounding
- Do not connect a grounding wire to a gas pipe, water pipe, lightning rod or ground ire of a telephone.
- Do not install the unit where flammable gas could leak.
- Install an earth leakage breaker relevant to where the air conditioner is to be installed (humidity etc).

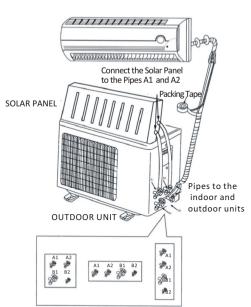
When you think that trouble has occurred

Solar Assisted Air- Conditioner Installation Picture

It's not a malfunctionin the followings ituations:

- 1. The air conditioner will not operate for approximately 3 minutes when restarted. This automatically protects the air conditioners microprocessor.
- 2. Air does not flow out quickly in the heating operation Wait while the air conditioner is preparing to blow out warm air.
- 3. The operation keeps stopping for approximately 2-12 minutes in the heating operation while the operation Indicator lamp lit. The outdoor unit defrosts (defrosting operation) when the external temperature is too low and humidity is too high.
- 4. Cracking sound is heard from the indoor unit. This sound is generated by the expansion or contraction of the front panel etc. This is due to changes in temperature.
- 5. Room air smells funny. The air conditioner sucks internal odour and blows it out with air.
- 6. Fan stops during DRY operation. If water condensing to the heat exchanger evaporates again the humidity increases. To prevent this, the fan operation of the indoor unit stops until the room temperature has dropped sufficiently.
- 7. Water flowing sound is heard during operation. This is the sound of refrigerant flowing inside the air conditioner.
- 8. Mist appears during COOL operation. The indoor warm air is cooled when the room temperature and the humidity is high. When the room temperature and humidity reduce the mist will disappear.
- 9. A mechanical sound is heard from the indoor unit. This is the sound of the switch turning the fan or compressor ON/OFF.
- 10. Water leaks from the outdoor unit. During cooling operation. The pipe or pipe connector section are cool and cause water to condense. Water adhering to the heat exchanger during heating operation drips.
- Thunder may cause operation failure. Stop the operation and pull out the power plug or turn off the breaker. After a bout 3 minutesre-start the unit.
- 12. The remote control signal cannot be received. When direct sunlight or strong lamplight shines on the remote control receiving section of indoor unit. The remote control signal may not be received. Shelter from the direct s unlight or turn down the lamplight.
- 13. Airflow direction is changed during operation. When the air conditioner is operated in the COOL or DRY mode with air blowing down for 1 hour. The direction is automatically set to level to prevent condensed water from dropping. While in heating operation, if the output air temperature is too low or when defrosting is done. The horizontal vane position is automatically set to horizontal.
- 14. Frost adheres to the vertical vanes. If the unit operates in high humidity for a lengthy time, water may condense on the vertical vanes and drip.

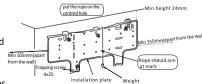
PLEASE NOTE: If the above items are checked and the air conditioner does not recover, Stop using it and consult the service dealer or the manufacturer advising the product type and the failure details.



Installing the Indoor Unit

1. Mounting the installation steel plate

Select the structure part (e.g. a Colum etc) on the wall and mount the installation plate horizontally.

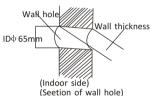


To prevent slight vibration from the installation plate the holes marked \blacktriangleleft on the above diagram must be anchored and the holes marked may be anchored by all means.

• If the bolts embedded in the concrete wall are used, mount the installation plate using 11x20. 11x26 ellipsoidal holes which distance is about 450mm. If the embedded bolts are too long use short ones in the market.

2. Making a hole in the wall

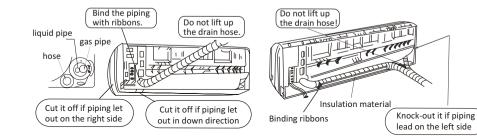
- Identify the position of the hole. The height should be lower than the bottom edge of the indoor unit.
- Drill 65mm diameter hole and then insert the wall socket.



Indoor Unit

3. Refrigerant and drainage piping work

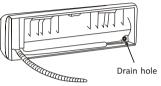
- Depending on the installation site the refrigerant and drainage piping can be let out in left, right, down or rear directions.
- Wrap the refrigerant inlet and outlet piping of heat exchanger together with drainage with binding ribbons.
- Make sure to put the drainage piping under the refrigerant piping



4. Changing the direction of the drainage piping

• If the drainage piping is to be led from the left side, modification of the direction should be done or else it will cause water leakage.

Drain stopple



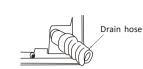
1. Remove the Drain stopple

2. Remove the drainage Hose



Insert the drain stopple in the drain hole on the left side of the indoor unit
Insert the drain hole on the right side of the indoor unit



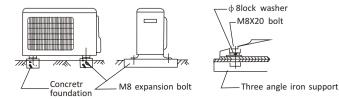


5. Installing the indoor unit on the mounting plate



Installing the Outdoor Unit and Piping Connection

- 1. Try as much as possible to transport the unit to the installation site as purchased
- 2. The outdoor unit should not be tilted by more than 30° when transporting.
- 3. Install the outdoor unit in concrete foundations or on a strong angle iron support and anchor outdoor unit legs by means of bolts and locking device.
- 4. The rear and sides of The outdoor unit should be placed at least 10cm from the wall and the fan at the front requires at least 50cm clearance.



Piping Connection

Indoor unit refrigerant piping connection

- 1. Remove the joint nut and protecting cap from the refrigerant piping of indoor heat exchanger.
- 2. Apply the accessory refrigerant oil thinly to the inner surface of the connection piping flare.
- 3. Connect the refrigerant piping with joint nut. Screw it down 3-4 circle with hand
- 4. Screw the joint nut tightly with two suitable wrenches.

Outdoor unit refrigerant piping connection

The connection method of out door unit refrigerant piping is the same as that of the indoor unit. Connect the refrigerant piping to the shut off/stop valve of the outdoor unit. Wrench specification and tightening torque refer to the table below.

	Pipe Diameter(mm-Inches)		
Model	Solar Panels	Gas	Liquid
12000 BTU	9.52 - 3/8″	9.52 - 3/8″	6.35 - 1/4″
16000 - 18000 BUT	9.52 - 3⁄/8″	12.7-1/2″	6.35 - 1/4″
22000 - 24000 BUT	9.52 - 3/8″	15.88 - 5/8″	9.52 - 3/8″

Pipe Diameter (inch)	Tightening Torque (kgf.cm)
1/4 ″	220-280
3/8″	350-420
1/2"	530-590
5/8″	750-800

Apply refrigerant oil

Remove the air in the indoor unit and piping_

The air, moisture and other foreign matter in the indoor unit or piping may cause operation current overloading and cause blocking of capillary tube. This leads to operation failure. Remove the air or moisture as follows:

Remove the caps from the service port of liquid stop values an stop and from the charging port and service port for gas stop value.

- 2. Insert a key hexagon socket screw into the valve inside of charging port for gas stop valve.
- Meanwhile, unscrew the liquid stop valve open anticlockwise for half circle continuing 8-10 sec. Then open the valve of charging port.
- Open the gas stop valve an d liquid stop valve completely using a key hexagon socket screw for unscrewing the valve inside anti clockwise.
- 5. Screw the caps of service ports (for both liquid and gas) and the charging port.



After connecting the pipes check every joint port, service ports and the charging port and the charging port for gas leakage with a leak detector or soapy water.

Insulation of joints and binding of piping

- 1. Insulate flare joints of the indoor heat exchanger and the connection piping with insulation so that no parts of them are exposed, which will eliminate dripping of condensation.
- 2. The connection piping between indoor and outdoor unit should be bound with tape.
- 3. If the connection piping goes through the roof, washing room or other high temperature and high humidity places, additional insulation material (optional) must be used to prevent condensation.

CAUTION

- Do not let dirt moisture or other matter get in connection piping during installation
- The bending radius of piping should be more than 100mm
- It is better to use torque wrenches. Do not use adjustable wrenches. If you use a solid wrench, the tightening torque can be estimated as follows: when a flare nut is tightening with a spanner and the tightening torque starts to increase rapidly, stop temporarily, then turn through 60-90 angle.

If the pipe length is more than 3m, charge the system with additional refrigerant.

Draining Piping Work

In order to confirm that the waste water is drained out reliably, install the drain pipe so that it slopes downward (Diagram 1)

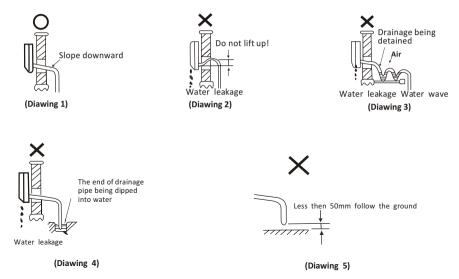
Do not Install is as shown from (diagram 2) or Diagram 5)



Solar panel's pipe Stop valve Spanner Liquid pipe Charging part Gas pipe Stop valve Stop valve Stop valve Spanner Liquid pipe Service part cap Stop valve

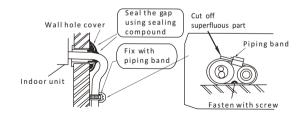
Service part cap



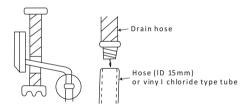


Sealing of the wall hole and fixing of the piping

- 1. Seal the gap between socket and wall hole using sealing compound
- 2. Fix the piping to the wall or pointed position with band.



- If the drainage hose provide in the indoor unit is not long enough the drainage hose provided in the accessories box can be joined together.
- If the drain hose passes through an indoor area, bind it with tape together with the connection piping (about its mounting requirements refer to p15)



Electric Wiring Connection and Trial Operation

Electric wiring connection

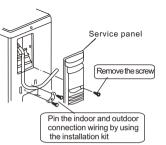
WARNING

TO BE INSTALED ACCORDING TO AS3000

- 1. Provide an exclusive circuit for power supply of the air conditioner. Wiring capacity should be suitable.
- 2. Install a power switch and fuse matching the air conditioner.
- 3. Always apply the A/C grounding
- 4. Type Y attachment-if the supply cord is damaged, it must be replaced by the manufacturer or service agent or similar qualified persons in order to avoid a hazard.
 - Remove the service panel and connect the indoor control wiring to outdoor connecting board according to the indoor and outdoor wiring diagram

PLEASENOTE: Cooling only type unit no red and yellow wiring (signal wiring): red and black wiring is used for fresh air exchange function

• Indoor and outdoor wiring diagram (cooling and heating)





- 1. Do not connect the wiring incorrectly. Check the wiring again after finishing connecting
- 2. Screw the connecting terminals on the connecting board tightly
- 3. Confirm the connecting terminals not flexible after screwing by pulling the wiring slightly.

Trial operation

Before trial operation be sure to check for looseness in wiring and mistaken polarity etc

- 1. Connect the power plug then turn on the mains switch. Observe if the operation indicatorlamp twinkles. If it twinkles it proves that there is poor contact with indoor outdoor signal wiring. Check it again
- Trial operation continues for about half an hour in COOL mode according to the operation method (refer pages 6 and 7) (For cooling and heating unit select COOL or HEAT depending on season). Cool air is expelled from the unit.
- 3. Adjust air flow velocity and direction according to the method (refer to page 8). Horizontal vane can be changed smoothly and air flow velocity changes.
- 4. The unit operation should be smooth and steady with no obvious vibration or abnormal noise. If obvious vibration or abnormal noise occurs adjust the installation and strength vibration measures.
- 5. Check indoor drainage making sure there is no drainage leaking.

CAUTION

- 1. After trial operation is completed use instructional manual to explain operation procedures to customer
- 2. Be sure to read this instruction manual before use. Keep this manual handy for later reference.

Electronic Diagram

