

# Single Phase Outdoor Unit Base Pan Heater Installation Manual KEH3P573597 / KEH3P573567

Read these Safety Considerations carefully before installing the drain pan heater. After completing the installation, check if the unit operates properly during the start-up operation.

### Meaning of DANGER, WARNING and CAUTION

	<b>DANGER</b>	Indicates an imminently hazardous situation which, if not avoided will result in death or serious injury.
	<b>WARNING</b>	Indicates a potentially hazardous situation which, if not avoided will result in death or serious injury.
	<b>CAUTION</b>	Indicates a potentially hazardous situation which, if not avoided may result in minor or moderate injury. It may also be used to alert against unsafe practices.

### IMPORTANT!

- The purpose of this heater is to melt snow that blows in from the outside and to prevent frost growth on the bottom frame of the outdoor unit.
- Do not shut off the power supply of the ground fault circuit interrupter even while this heater is stopped.
- Increasing the size of a power supply wiring (leading wire) is required depending on the model of the indoor unit.
- This product cannot be used in combination with a central drain plug.
- At heavy snowfall regions, also install a snow protection hood or high stand.
- Inform users that they should store this installation manual for future reference.
- After completing the installation, make sure that the unit operates properly during the startup operation.
- All phases of the field installation, including, but not limited to, electrical, piping, and safety, must be done in accordance with manufacturer's instructions and must comply with national, state, provincial, and local codes.



### WARNING

Only personnel that have been trained to install, adjust, service or repair (hereinafter, "service") the equipment specified in this manual should service the equipment. The manufacturer will not be responsible for any injury or property damage arising from improper service or service procedures. If you service this unit, you assume responsibility for any injury or property damage which may result. In addition, in jurisdictions that require one or more licenses to service the equipment specified in this manual, only licensed personnel should service the equipment. Improper installation, adjustment, servicing or repair of the equipment specified in this manual, or attempting to install, adjust, service or repair the equipment specified in this manual without proper training may result in product damage, property damage, personal injury or death.



### WARNING

For the transmission wiring and the power supply wiring, shape the wirings in such a way that service covers and other structures do not rise up, and securely install covers and panels. Incomplete installation of covers and panels may cause electric shock or fire.



### DANGER

Do not touch the heater unit without wearing gloves. The temperature of the heater unit will become high when the heater is turned on. Touching the heater unit with bare hands will result in burns or injury.





## WARNING

This equipment can be installed with a Ground-Fault Circuit Interrupter (GFCI). Although this is a recognized measure for additional protection, with the grounding system in North America, a dedicated GFCI is not necessary. Shut off the power supply before touching electrical parts.

There is the risk of electric shock if charged parts are touched.

For the transmission wiring and the power supply wiring, shape the wirings in such a way that service covers and other structures do not rise up and securely install covers and panels.

Incomplete installation of covers and panels may cause electric shock or fire. Use the specified wires, and firmly connect and secure the wires so that the force of the wires is not applied on the terminal connections.

Incomplete connection or fixing of wires may cause electric shock, generation of heat or fire.



## WARNING

- **Request the dealer or an authorized technician to install the product.** Improper installation of the product could result in water leakage, an electric shock, or fire.
- **The product must be installed according to the instructions given in this manual.** Incomplete installation of the product could result in water leakage, an electric shock, or fire.
- **Use the supplied or specified installation parts** Use of other parts could result in the unit becoming loose and falling, water leakage, electric shock, or fire.
- **Turn off the power supply at the time of installation.** Touching any electrical parts may with the power supply turned on could result in electric shock.
- **Use specified wires. Connect and fix the wires so that the wires will not put improper force on the terminal junctions.** Wires connected or fixed improperly could result in terminal overheating, an electric shock, or fire.
- **When wiring and connecting the indoor and outdoor units, carefully arrange the wiring so that they will not put improper force on the structures.** Install covers over the wires. Incomplete cover installation could result in terminal overheating, an electric shock, or fire.



## CAUTION

Do not install the unit in the following locations:

1. Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen. Plastic parts may deteriorate and fall off or result in water leakage.
2. Where corrosive gas, such as sulfurous acid gas is generated, where acidic or alkaline steam mist forms, and where salty atmosphere such as coastal areas. Corroding copper pipes or soldered parts may result in refrigerant leakage.
3. Near machinery emitting electromagnetic waves or where there are large voltage fluctuations such as factories. Abnormalities may occur in the control system which will prevent normal operation.
4. Where flammable gas may leak, where there is carbon fiber, or ignitable dust suspension in air, or where volatile flammables such as thinner or gasoline are handled, and vehicles, marine vessels, etc. Any gas leaking and building up around the unit may cause combustion.
5. Do not install the product in places where there is danger of exposure to flammable gas leakage. If the gas leaks and builds up around the unit, it may catch fire.
6. Do not install the outdoor unit in places where small animals may nest in the outdoor unit. If small animals intrude and touch the internal parts of the outdoor unit, the outdoor unit may malfunction, generate smoke, or ignite. Advise the user to keep the place clean.



## CAUTION

- Wear protective gloves at the time of installation. Touching the suction grille or aluminum fin of the outdoor unit may result in injury.
- Do not grab the top plate of the outdoor unit carelessly when removing the top plate. The sharp edge of the top plate may cause injury.

# REFERENCE OF DRAIN PAN HEATER INSTALLATION MANUAL

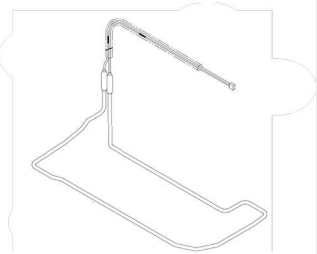

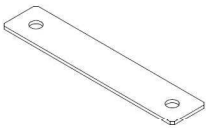
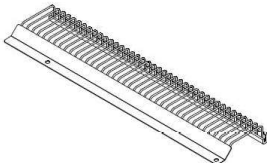


## Safety Considerations for Installation of Drain Pan Heater

- This product cannot be used in combination with a central drain plug.

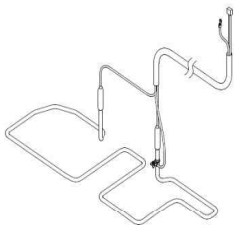


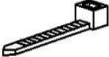
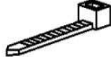
## ACCESSORIES

1. Make sure that the required quantities of the following accessories are included in the product package.

- For DZ17VSA181, 241, 301, 361AA

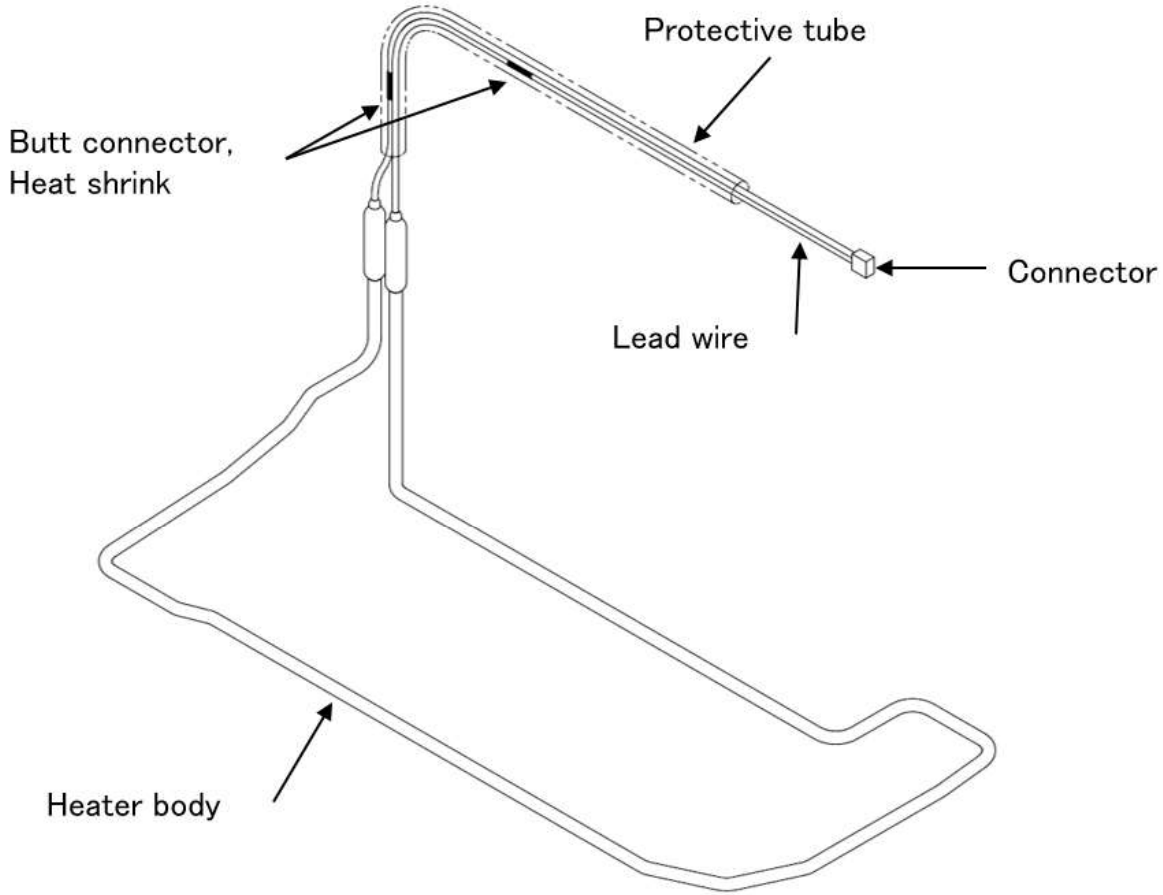
Name	Drain pan heater	Heater fixture	Heater fixture(2)
Q'ty	1	3	1
Shape			
Name	Protection plate	Screw	Tie
Q'ty	1	7	2
Shape			

- For DZ17VSA421, 481, 601AA

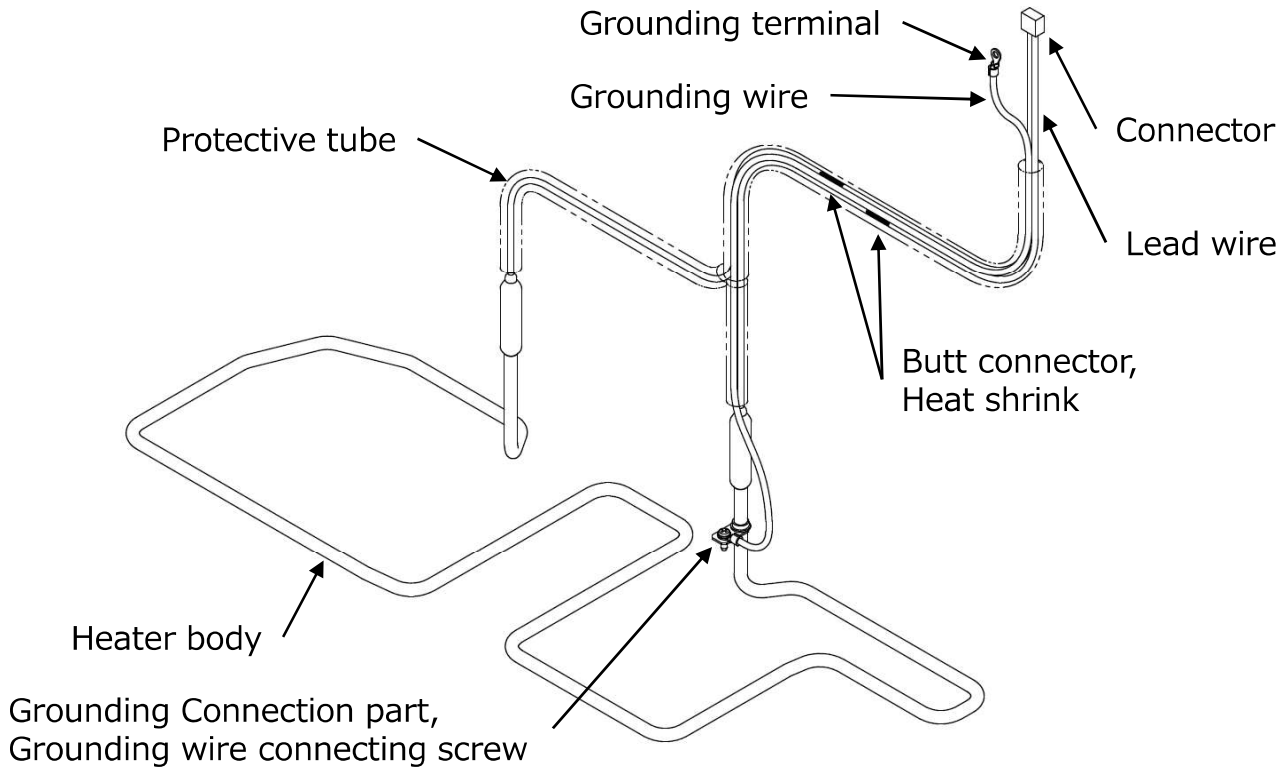
Name	Drain pan heater	Heater fixture	Screw	Tie	Tie (HEAT WEATHER RESISTANCE)
	1	4	4	3	3
Shape					

2. Name of heater body parts

- For DZ17VSA181, 241, 301, 361AA



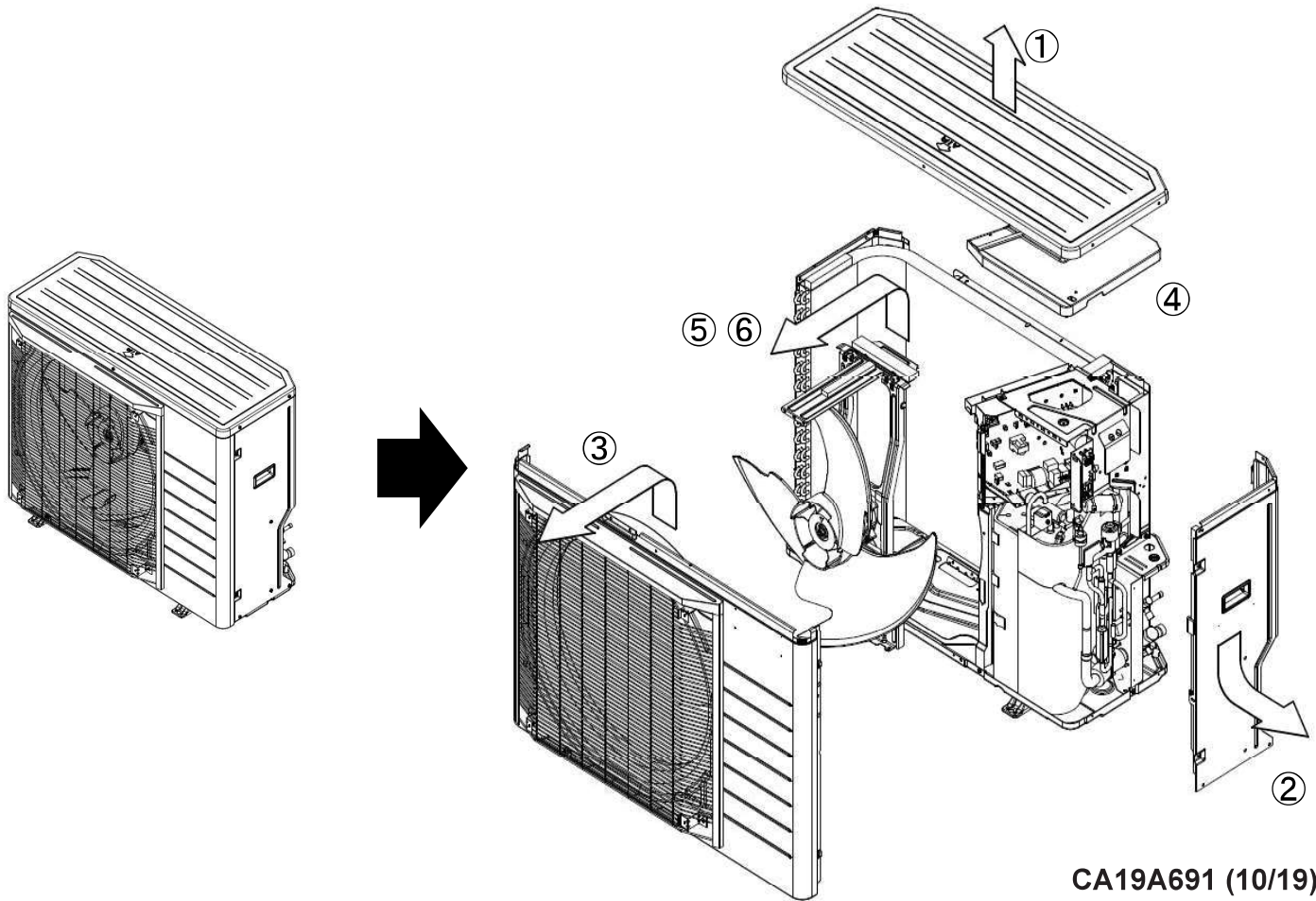
- For DZ17VSA421, 481, 601AA



## REMOVING OUTDOOR UNIT BODY PARTS (1/2)

For DZ17VSA181, 241, 301, 361AA

1. Remove the top plate. (6 screws)
2. Remove the right side plate.(6 screws)
3. Remove the front plate. (5 screws)
4. Remove the anti-drip cover.
5. Remove the fixing screws at the lower section of the fan motor base. (2 screws)
6. Remove the fan motor base together with the propeller fan and ensure that stress is not placed on the propeller fan when placing them aside.
  - Do not remove the fan motor harness.
  - Ensure that the fan motor harness does not come into contact with the edges of the heat exchanger or other components.

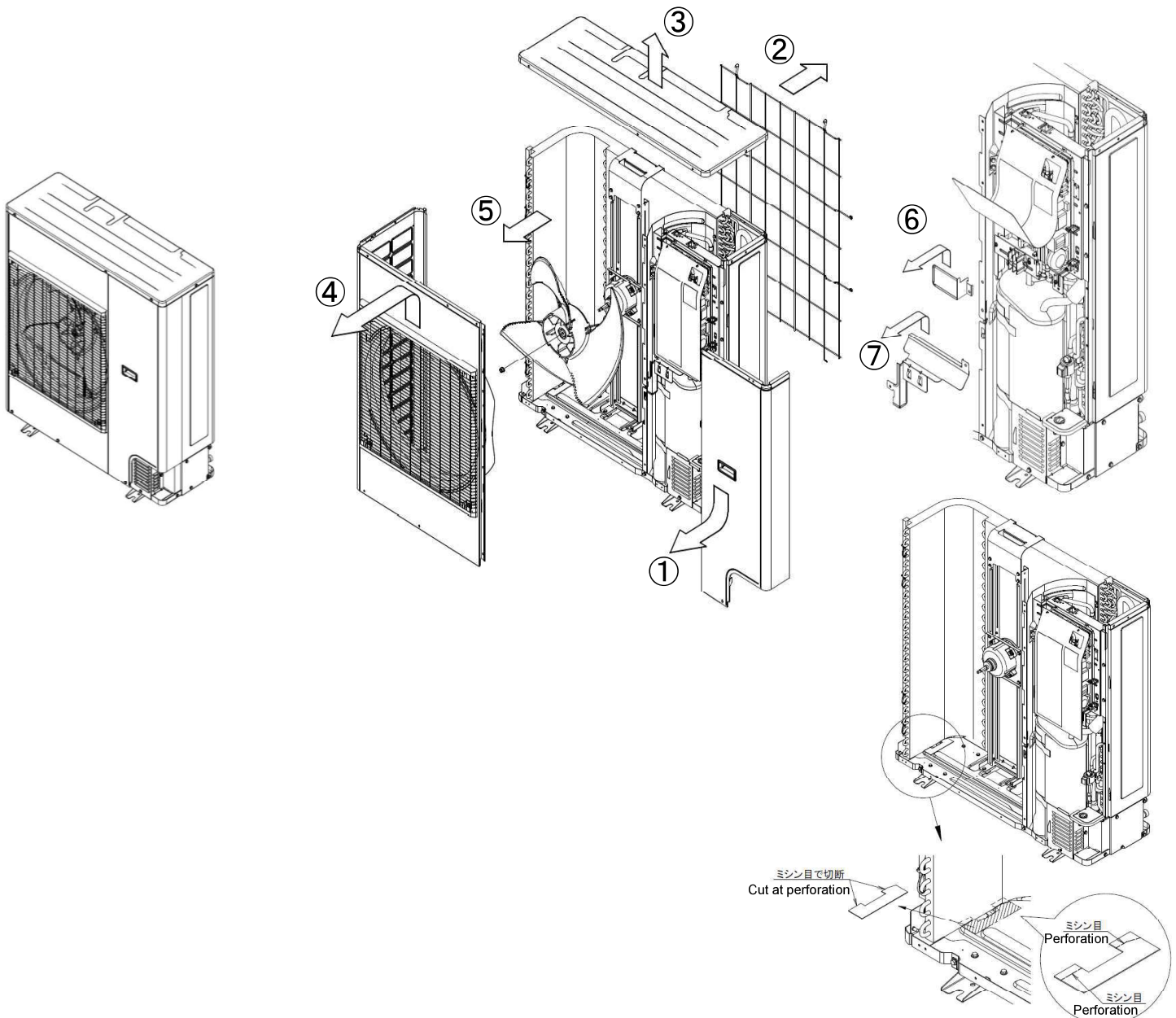


CA19A691 (10/19)

## REMOVING OUTDOOR UNIT BODY PARTS (2/2)

For DZ17VSA421, 481, 601AA

1. Remove screws of front panel (2), and pull the panel downwards to remove to the front (2 screws).
2. Remove the suction grille (3 screws).
  - Handle the suction grill with care.
3. Remove the screws of the top panel, and lift the panel upwards to remove (8 screws).
4. Remove the screws of front panel (1), and pull the panel upwards to remove to the front (8 screws).
5. Remove the fan lock nuts, and remove the fan to the front.
  - Store removed parts carefully to prevent them from being damaged and take care not to lose lock nut.
6. Remove Shield Plate (1 screw).
7. Remove Mounting plate (1 screw)

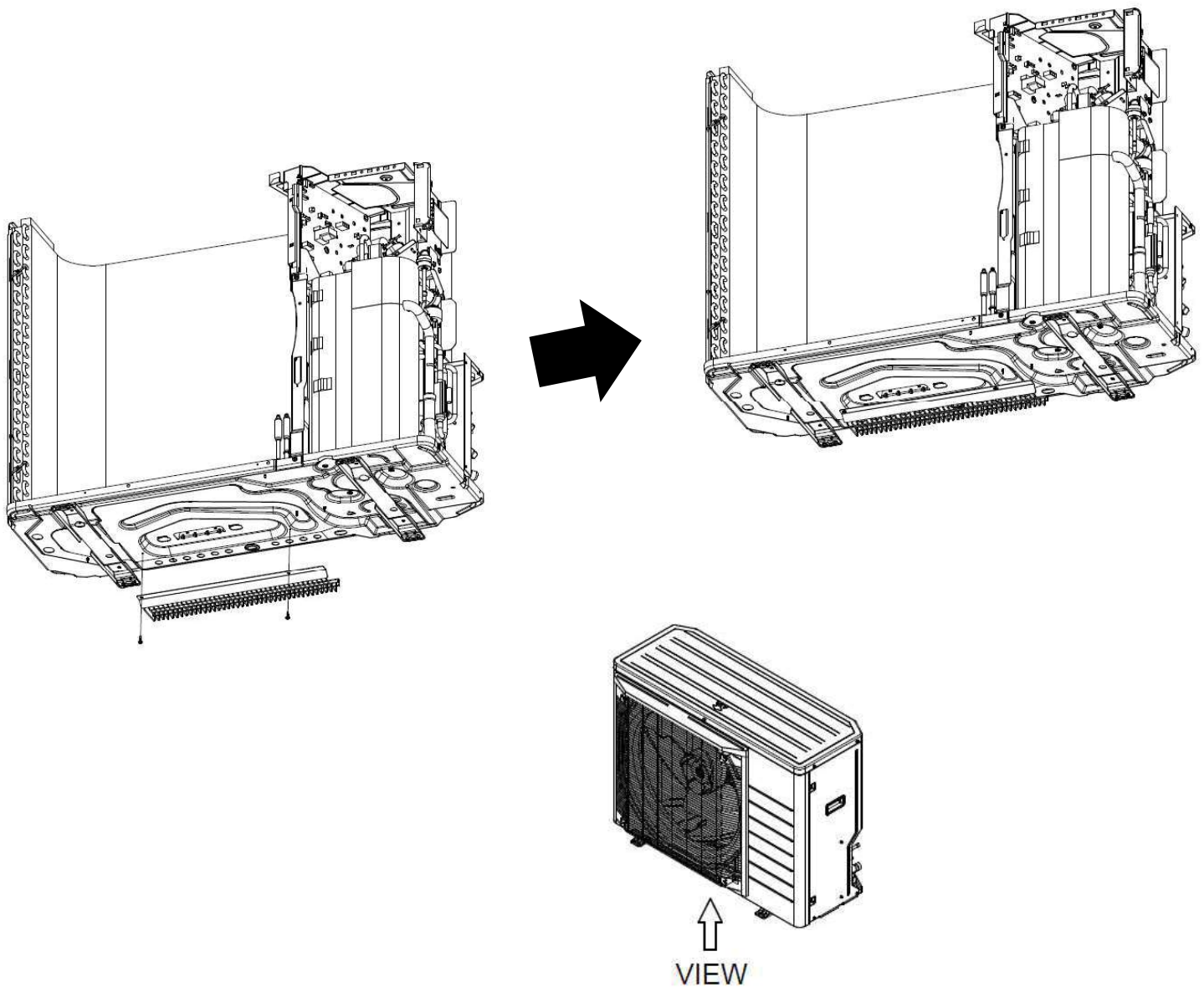


# Installing Drain Hole Protective Plate

(only DZ17VSA181, 241, 301, 361AA and when necessary)

- If there is the risk of direct contact with the electric heater from the drain hole in the bottom plate as a result of installing the outdoor unit at a high level, install the protective plate according to the installation procedure below.
- When there is no risk of contact with the electric heater, there is no need to install the protective plate, proceed to section 5) Installing Drain Pan Heater.

1. Drill two tapped prepared holes (3.1 mm dia.) for installing the protective plate on the bottom plate (See step 2 on page 8 for the hole positions).
  - Drill the holes after positioning the protective plate against the actual bottom plate for alignment.
2. Install the protective plate using the mounting screws from the bottom of the unit. (tightening torque 1.2 to 1.8 N•m)



# INSTALLING DRAIN PAN HEATER (1/2)

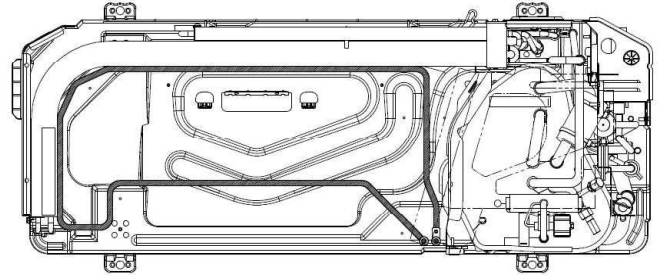
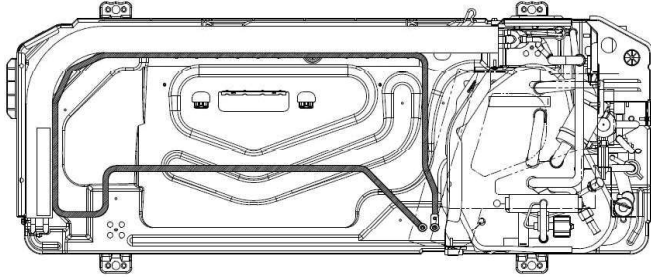
For DZ17VSA181, 241, 301, 361AA

1. Install the drain pan heater referenced to the below picture.

- The drain pan heater should be installed so that it firmly adheres to the bottom frame.

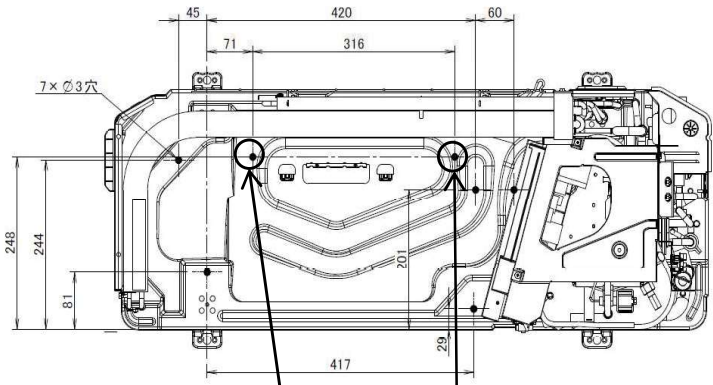
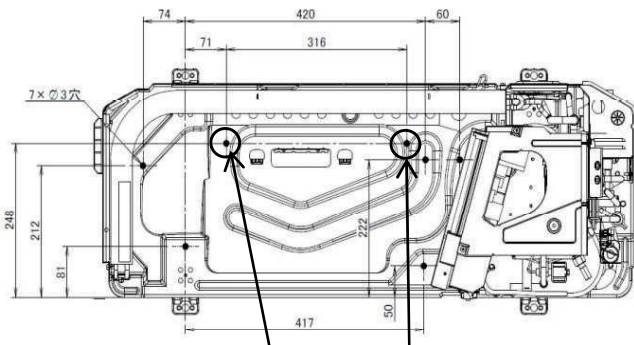
- For DZ17VSA181, 241, 301AA

- For DZ17VSA361AA

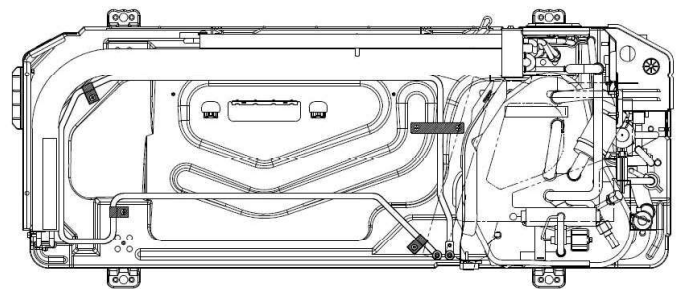
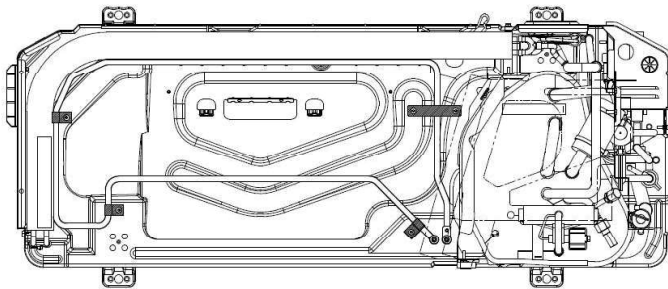


2. Drill holes (3.1 mm dia.) in the bottom plate. (tightening torque 1.2 to 1.8 N•m)

- Place the actual components to ensure positioning is correct before drilling holes.



3. Fix the drain pan heater with the screws.



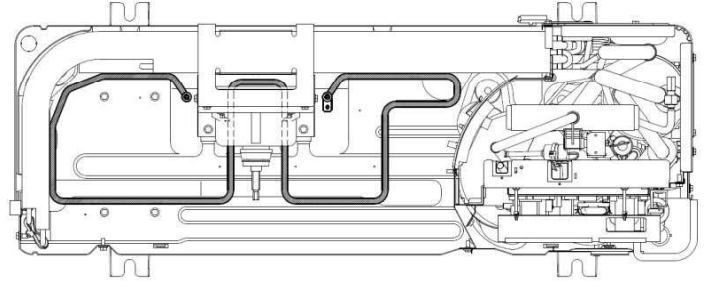
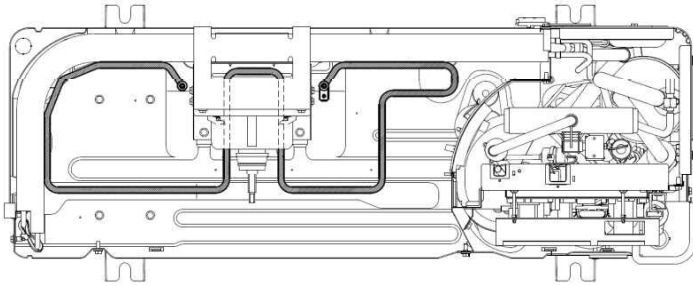
# INSTALLING DRAIN PAN HEATER

For DZ17VSA421, 481, 601AA

1. Install the drain pan heater referenced to the below picture.

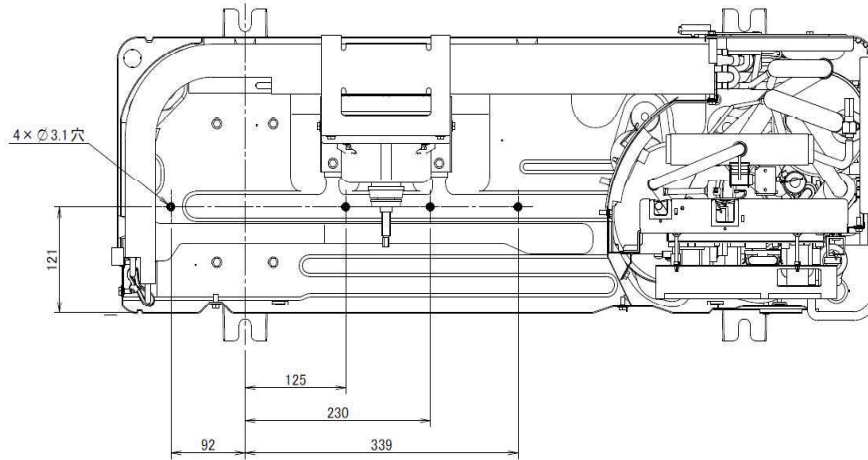
• For DZ17VSA421, 481AA

• For DZ17VSA601AA



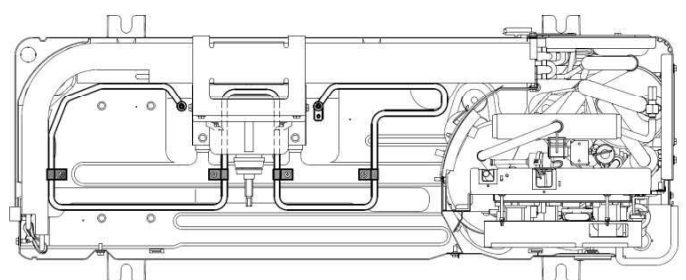
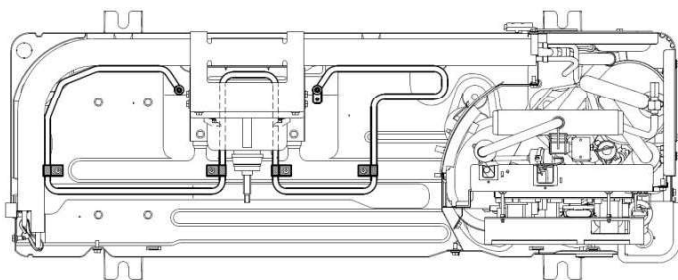
2. Install the Heater fixture in accordance with dimple.

3. Align with the position of the heater fixture hole, and drill four tapped prepared holes (3.1 mm dia.) for installing the heater fixtures on the bottom plate.



4. Secure the drain pan heater in place with the heater fixture and included screws. (tightening torque 1.2 to 1.8 N•m)

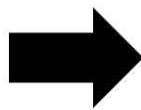
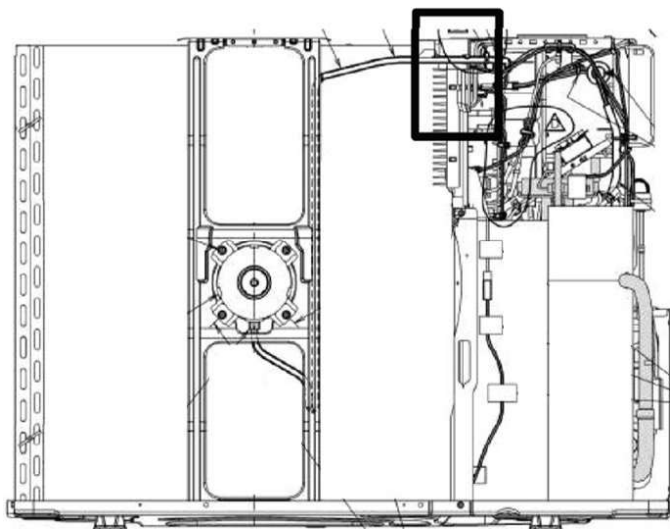
• Secure the drain pan heater firmly.



# ELECTRIC WIRING WORK (1/2)

For DZ17VSA181, 241, 301, 361AA

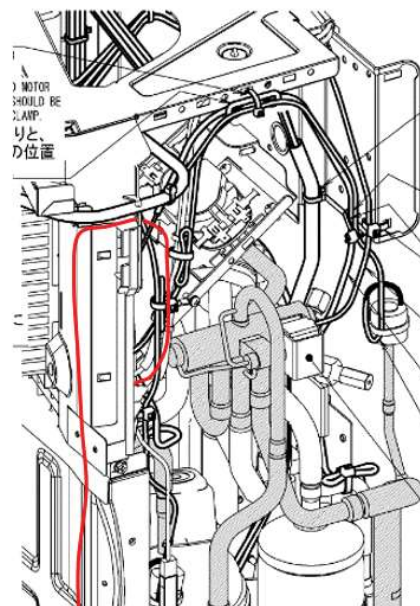
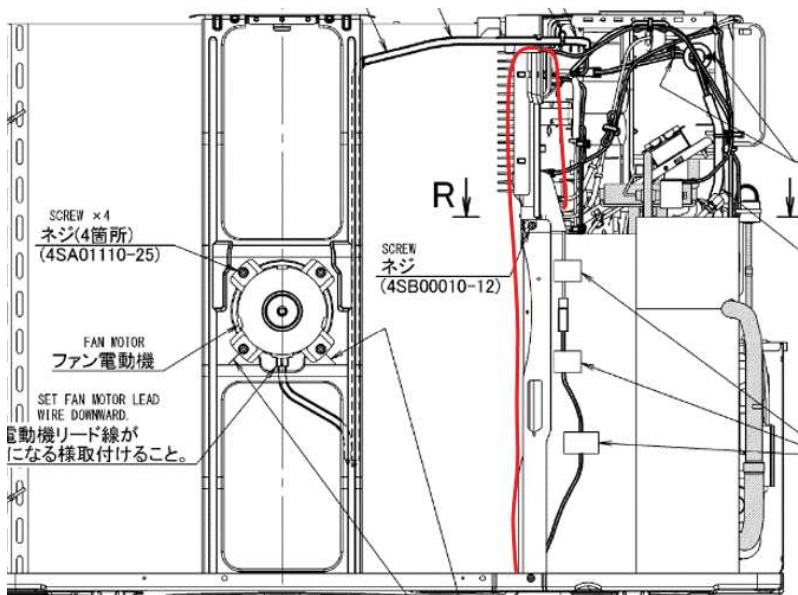
1. Install the fan motor base.
  - Be careful not to confuse screw types.
2. Separate the removable plastic tab from the plastic control box at the location shown in the image. The tab is removed by applying a slight pressure to twist the tab free from the control box.



Detail



3. Insert the drain pan heater harness into the space where the removable plastic tab was separated from the control box

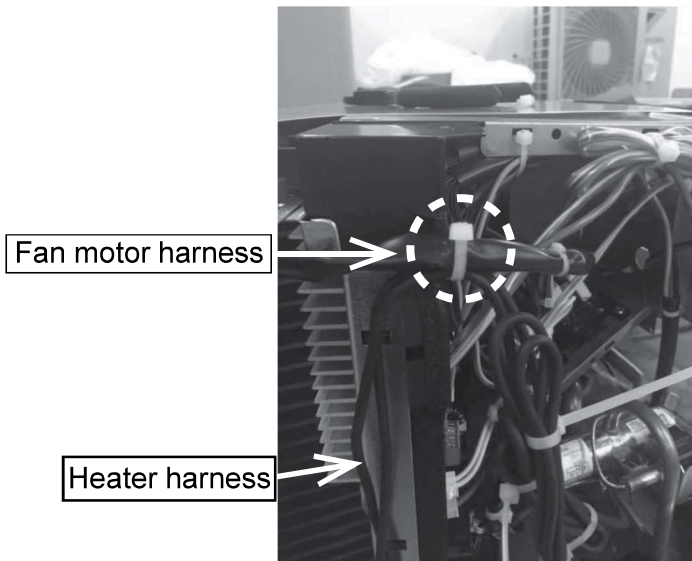


4. Connect the connector of the drain pan heater to the PCB(X29A) of the outdoor unit.



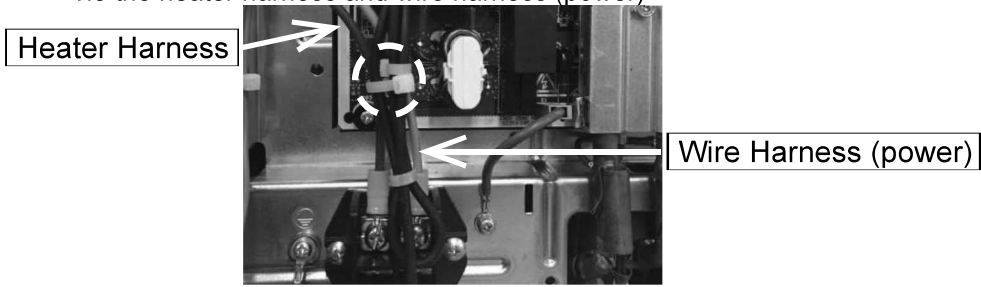
X29A

5. Tie the heater harness and fan motor harness. Ensure there is no slack on the heat exchanger side.



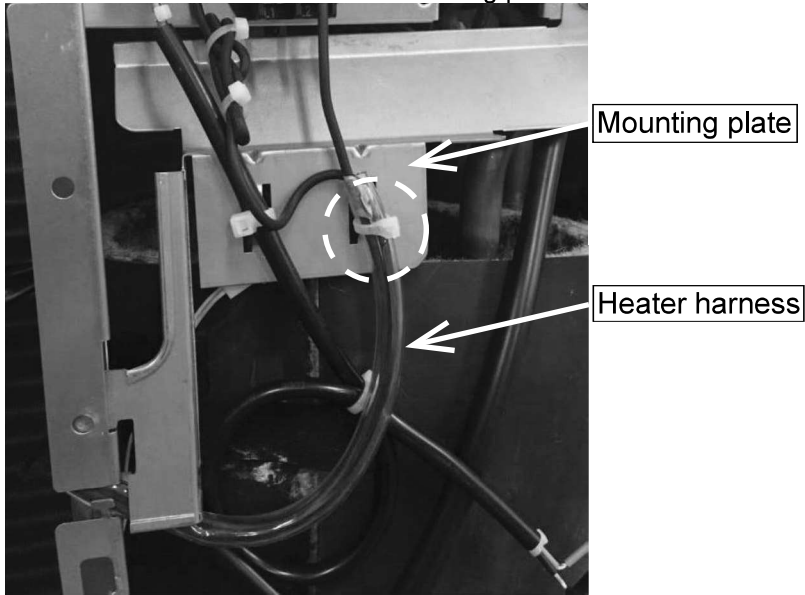


5. Tie the heater harness and wire harness (power)



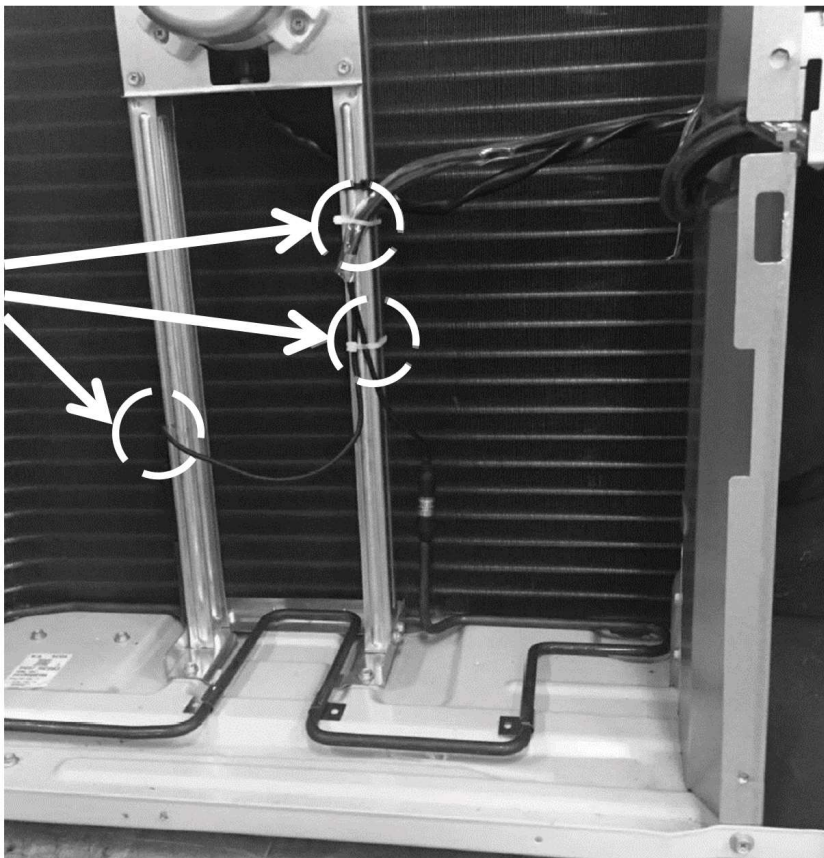
6. Attach Shield Plate and Mounting plate.

7. Tie the heater harness to the Mounting plate.



8. Secure heater harness to the fan motor stand in three place with the ties according to the image below.

- Prevent the heater harness from coming into contact with the propeller fan.



## TEST RUN

1. Check that the electric wiring is correctly connected.
2. Before turning the electric heater ON, check that the insulation resistance value is 1 MΩ or more.
  - Measure the insulation resistance value across the electric heater connection connector and the electric heater ground connection terminal with a 500 VDC insulation resistance meter.
3. Install the fan with the lock nut. (tightening torque 5.4 to 6.4N•m)
4. Referring to "2 Removing Outdoor Unit Body Part," install the frame and top.
5. Turn the power ON, and check that the drain pan heater heats up.
  - Power is not supplied to the heater when the outside air temperature is high. This is not an abnormality. (thermal switch operation (on PCB): ON at 3 °CDB (37.4FDVB), OFF at 5°CDB (41FDB))

THIS PAGE LEFT INTENTIONALLY BLANK

**CUSTOMER FEEDBACK**

Daikin is very interested in all product comments.  
Please fill out the feedback form on the following link:  
<https://daikincomfort.com/contact-us>  
You can also scan the QR code on the right to be directed to the feedback page.

