

**Before installation**

- This product is designed for prevention of ice on the bottom of the outdoor unit heat exchanger and the clogged drain hole caused by freezing in severe winter.
- To drain properly, a drain socket and a concentrated drain pan are not allowed to be used with this product.

## SAFETY PRECAUTIONS

- Carefully read this section 'Safety Precautions', and securely install the optional parts.
- Be sure to observe the cautions described here: They include critical contents for safety.
- The following indications show the classifications for danger, and possible consequences following incorrect handling.

**⚠ WARNING** Incorrect handling could lead to death or serious injury.

**⚠ CAUTION** Incorrect handling could lead to injury or damage to house and household articles.

- After installation, perform a test run and make sure that there is no abnormality, and ask your customer to keep this installation sheet with the installation manual at all times.
- Also ask the customer to transfer these manuals to a new user if the user changes.

### ⚠ WARNING

**Ask the dealer or specialist for installation.**

- If installed incorrectly by user, water leak, electric shock, fire, etc. could result.

**Carefully install the optional parts according to this installation sheet.**

- Incorrect installation could cause water leak, electric shock, fire, etc.

**Use the provided parts and the specified parts for installation.**

- Improper parts could cause electric shock, fire, water leak, and injury caused by fall of the unit.

**Use the specified electric wires. Connect and fasten the electric wires securely to the terminals so external force on the wires will not apply on the terminals.**

- Improper connections and fastening could cause fire.

**Mount the service panel on the outdoor unit securely.**

- Incomplete installation may result in electric shock and fire caused by dust, water, etc.

### ⚠ CAUTION

**Do not install the unit where flammable gas may exist or leak.**

- If the flammable gas should leak and accumulate around the unit, explosion may result from it.

**Ground the unit correctly.**

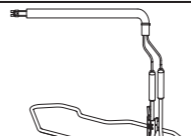
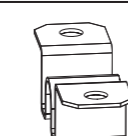
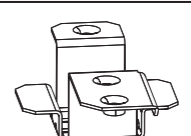
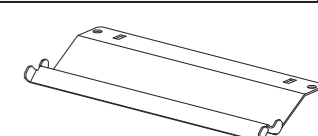


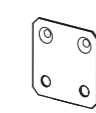





- Do not connect the ground wire to a gas pipe, a water pipe, a lightning rod, or a telephone ground wire. Improper grounding may cause electric shock.
- The grounding is performed with your hands touching the fins of the heat exchanger. Wear protective equipment such as gloves and the like in advance.

**Install an earth leakage breaker.**

- Failure to install an earth leakage breaker may result in electric shock.

## 1 Accessories

This package includes the following parts besides this installation sheet.

① Base heater	1	② Heater support U	2	③ Heater support L	2	④ Heater plate	1
							
⑤ Cable tie	3	⑥ Fastener	2	⑦ Earth plate	1	⑧ Earth wire	2
							
⑨ Screw M4×8	8	⑩ Self-drilling screw	2	⑪ Spec label	1	⑫ Cable strap	2
							

## 2 Preparation

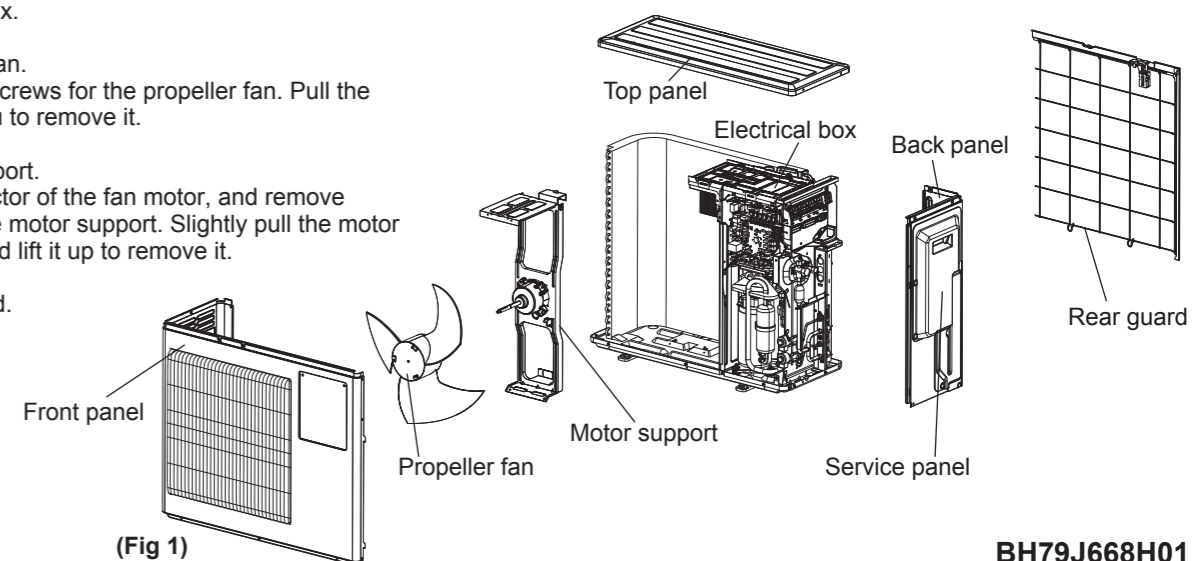
It is easier to mount the base heater before installing the outdoor unit.

- Make sure that the main power supply to the unit is OFF.
- Do not lose the removed screws. Many screws will be removed to install the base heater.
- Eliminate dust, dirt, etc.

## 3 Before installation

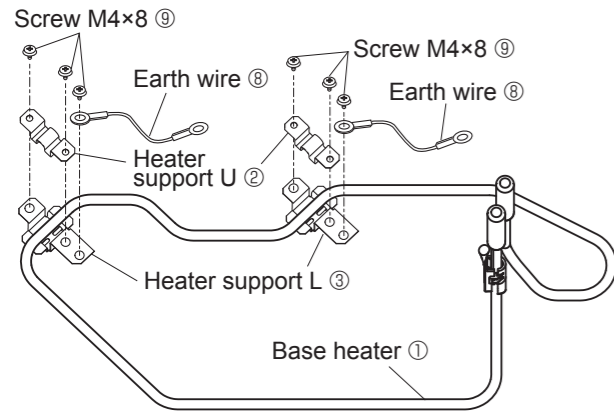
Before installation, follow the procedures below to remove some parts from the outdoor unit.  
NOTE: Turn OFF power supply before disassembly.

- 1) Remove the screw fixing the service panel.
- 2) Remove the service panel.
- 3) Remove the screws fixing the top panel.
- 4) Remove the top panel.
- 5) Remove the screws fixing the front panel.
- 6) Remove the front panel.
- 7) Remove the screws fixing the back panel.
- 8) Remove the back panel.
- 9) Disconnect the connectors (CN791, CN792, CN712, CNTH2, CNTH1, CN797, CN63H, CNF1, and relay connector), and remove the electrical box.
- 10) Removal of propeller fan.  
Remove the mounting screws for the propeller fan. Pull the propeller fan toward you to remove it.
- 11) Removal of motor support.  
Disconnect the connector of the fan motor, and remove mounting screw for the motor support. Slightly pull the motor support toward you and lift it up to remove it.
- 12) Remove the rear guard.

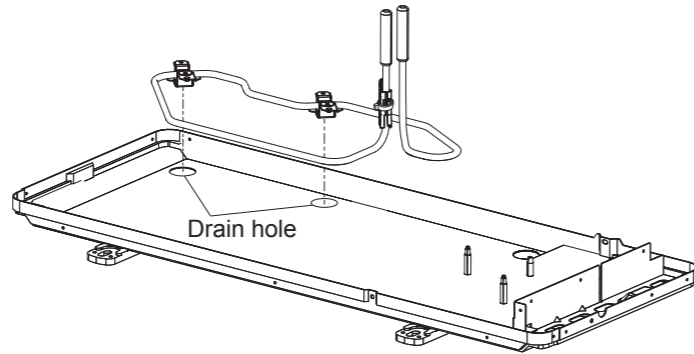


#### 4 Preparation for mouting the base heater

- 1) Fix the heater support U ② and L ③ to the base heater ① with 2 screws M4×8 ⑨ (2 places) as shown in the Fig 2.  
(Place the heater supports as they fit in the drain holes).
- 2) Fix an earth wire ⑧ to each heater support L ③ with screw M4×8 ⑨.

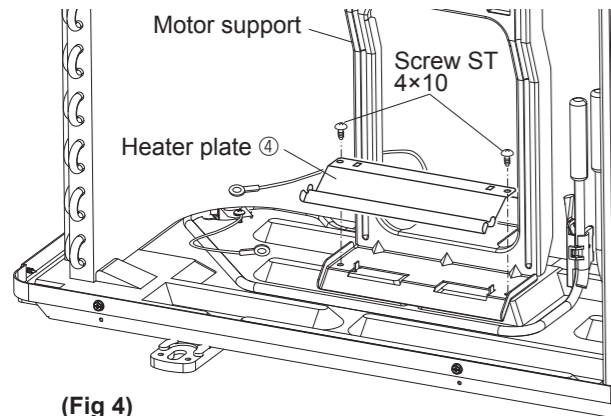


(Fig 2)

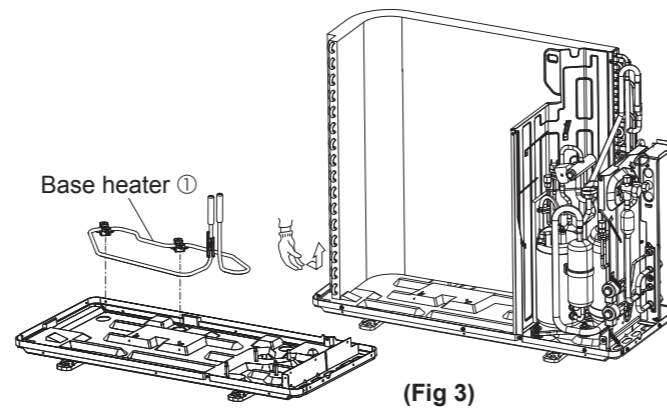


#### 5 Installing the base heater

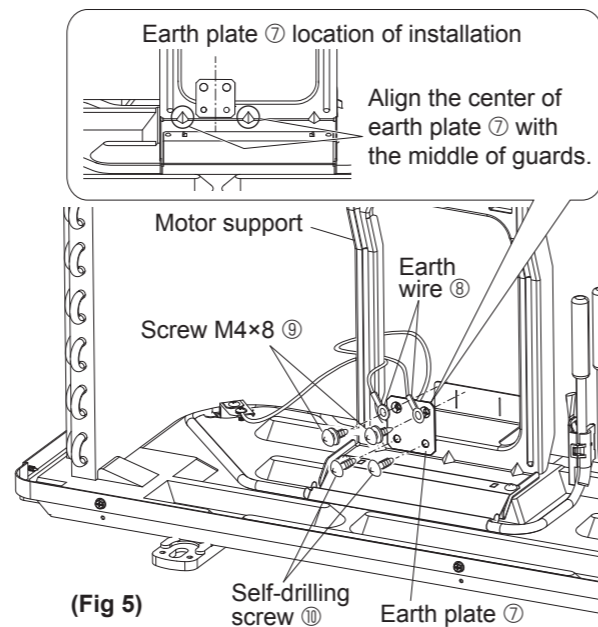
- 1) Hold the left lower side of the heat exchanger and slightly lift it up as shown in the Fig 3.
- 2) Insert the base heater ① under the heat exchanger, and align it with the groove on the base. Confirm that the heater supports are placed as they fit in the drain holes.
- 3) Mount the motor support.  
NOTES:
  - Take out the earth wire to the left side of the motor support.
  - Make sure that the lead wire is not caught between the bottom of the motor support and the base.
- 4) Fix the front side of the base heater ① with the heater plate ④.  
Fix the heater plate ④ and motor support with the 2 screws that were installed to fix the motor support as shown in the Fig 4.
- 5) Screw the earth plate ⑦ on the motor support by self-drilling screw ⑩ as shown in the Fig 5.
- 6) Fix the 2 earth wires ⑧ which are attached to the heater support to the earth plate ⑦.



(Fig 4)



(Fig 3)

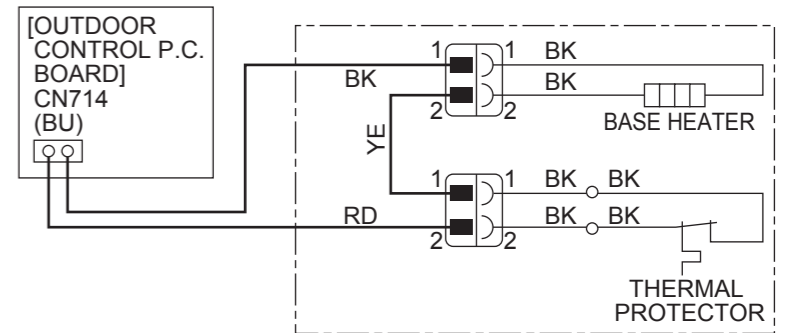


(Fig 5)

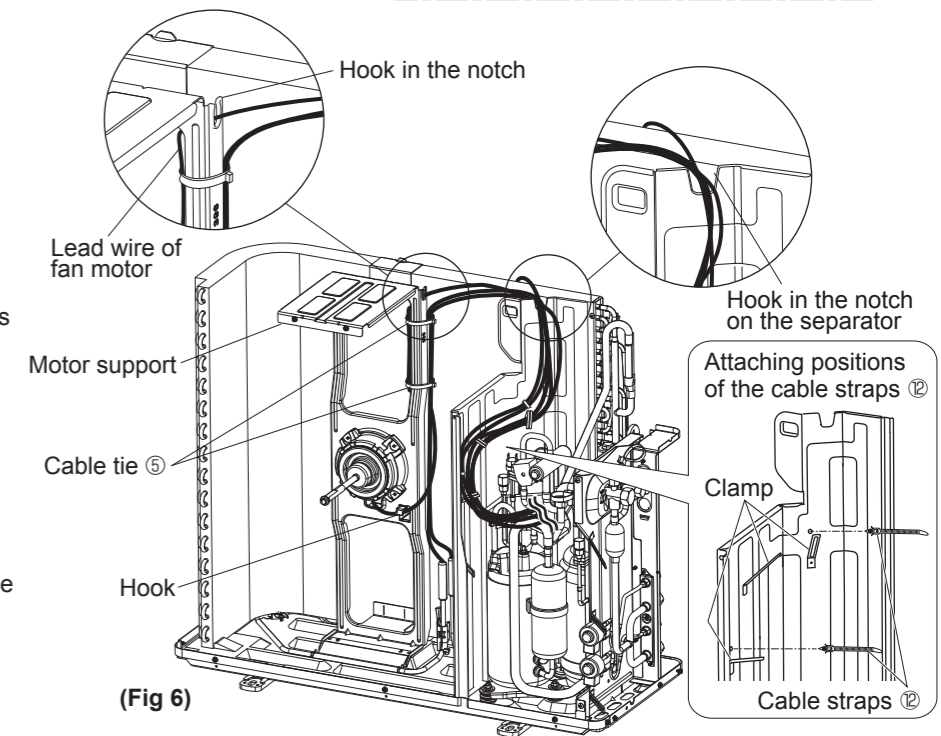
#### 6 Securing the lead wires

##### Wiring diagram

Connect the lead wires according to the wiring diagram on the right.



- 1) Bundle the lead wires of the base heater and the fan motor together, and fix 2 positions with the cable ties ⑤.
  - Secure the lead wires so they will not interfere with the propeller fan.
  - Hook the lead wire of the fan motor to the hook on the motor support and the ditch.
- 2) Reinstall the rear guard.
- 3) Attach the 2 cable straps ⑫ on the separator as shown in Fig 6.
  - The holes to mount the cable straps ⑫ are covered with aluminum tape.
  - Remove the tape before attaching the cable straps ⑫.
- 4) Hook all the lead wires in the notch of the separator.
- 5) Secure the lead wire of the base heater with the 2 cable straps ⑫.
- 6) Secure other lead wires with 3 clamps on the separator.
- 7) Reinstall the electrical box.  
Reconnect the connectors.
- 8) Connect the lead wire of the base heater to the connector CN714 on the controller circuit board as show in the Fig 7.
- 9) Bundle all the connectors except CN791, CN792, and relay connector with the fastener ⑥.



(Fig 6)

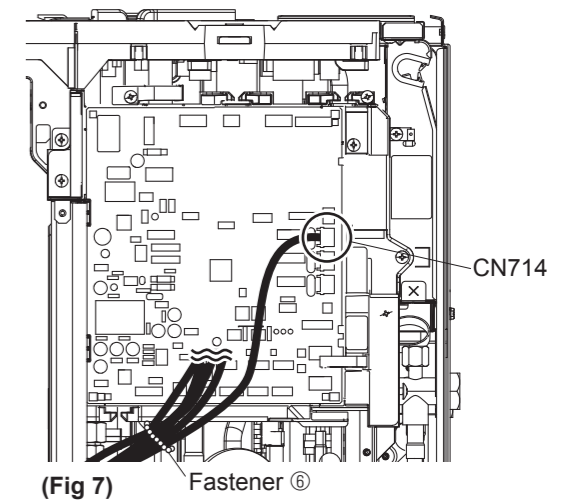
#### 7 After installation

- 1) Reinstall the propeller fan, back panel, front panel, top panel, and service panel.
- 2) Attach the spec label ⑪ below the spec name plate.
- 3) Turn on the breaker, and perform test run to confirm that it works properly.
  - \* Do not install either drain socket which is provided with the outdoor unit or purchased separately.
  - Inside of the drain hose and/or the drain socket may freeze if the drain socket is installed.

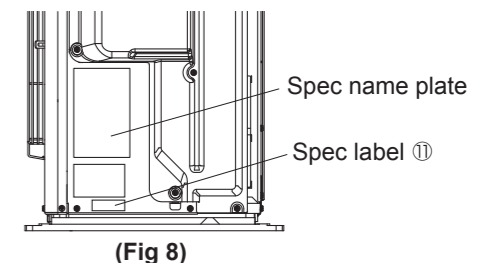
- Tighten the propeller fan with a torque of  $3.4 \pm 0.5 \text{ N}\cdot\text{m}$  [ $2.5 \pm 0.4 \text{ ft}\cdot\text{lbs}$ ]( $34 \pm 5 \text{ kgf}\cdot\text{cm}$ ).
- Rotate the propeller fan and make sure that the base heater and the lead wires do not interfere with the movement of propeller fan.

##### ⚠ WARNING

Mount the outer panels securely. Incomplete installation may result in electric shock and fire caused by dust, water, etc.



(Fig 7)



(Fig 8)