



REMOVAL PROCEDURE



S E R V I C E M A N U A L

5.0/6.0 kW Class

-  Outdoor Unit
-  Inverter
-  Pair Type



Service Manual Removal Procedure

Outdoor Unit

●Cooling Only

RKV50NRV16

RKV60NRV16

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Note: ♦ The illustrations may be slightly different depending on the model.

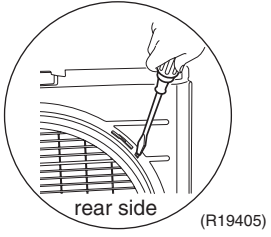
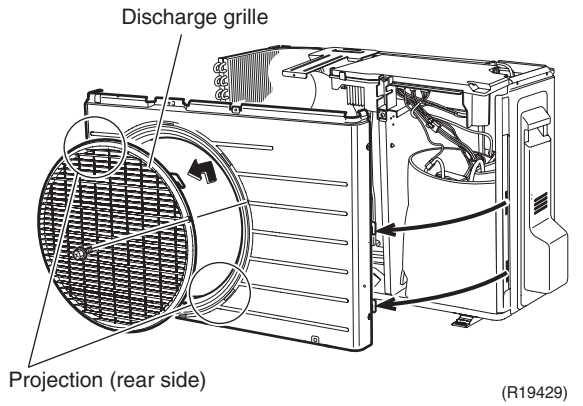
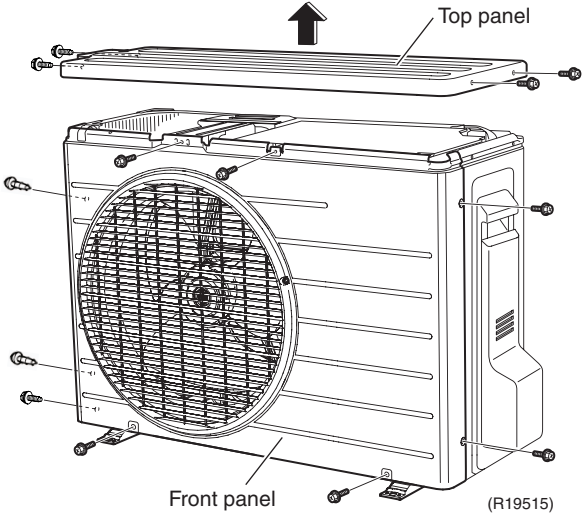
1. Outer Panels



Warning

◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

| Step | Procedure | Points |
|------|---|--------|
| 1 | Remove the 4 screws and remove the top panel. | |
| 2 | Remove the 9 screws of the front panel. | |
| 3 | Unfasten the right side hooks and remove the front panel. | |
| 4 | Remove the screw and remove the discharge grille. | |



■ The discharge grille has 2 projections to prevent its rotation. Press the projection from the rear side and rotate the discharge grille to remove it.

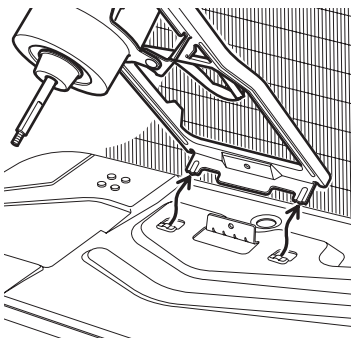
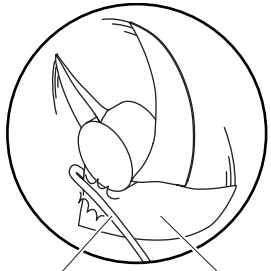
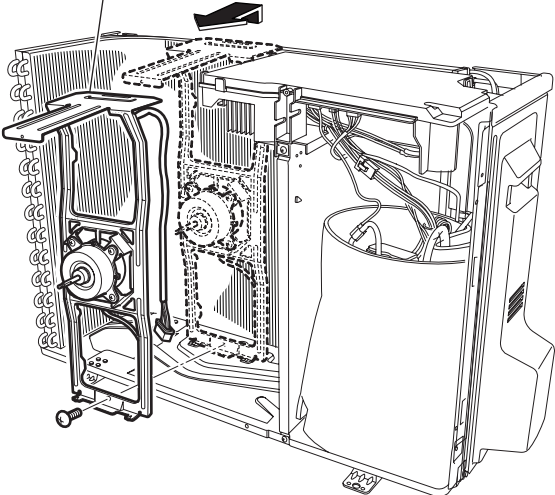
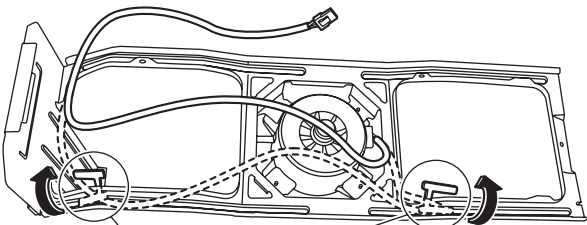
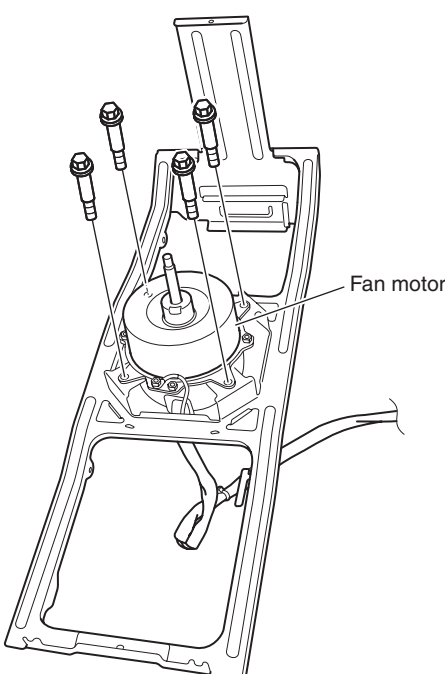
2. Outdoor Fan / Fan Motor



Warning

- ◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

| Step | Procedure | Points |
|---|------------------------------------|--|
| <p>1 Disconnect the connector [S70].</p> <p>2 Release the fan motor lead wire from the groove of the partition plate and the 4 hooks on the electrical box.</p> | <p>[S70]</p> <p>(R19430)</p> | [S70]: fan motor |
| | <p>Hook</p> <p>(R19360)</p> | <ul style="list-style-type: none"> ■ Nut size: M6 |
| <p>3 Remove the nut and remove the outdoor fan.</p> | <p>Outdoor fan</p> <p>(R19431)</p> | <p>10 mm (0.39 inch)</p> <p>(R18954)</p> <ul style="list-style-type: none"> ■ When reassembling, align the ▼ mark of the outdoor fan with the D-cut section of the motor shaft. |

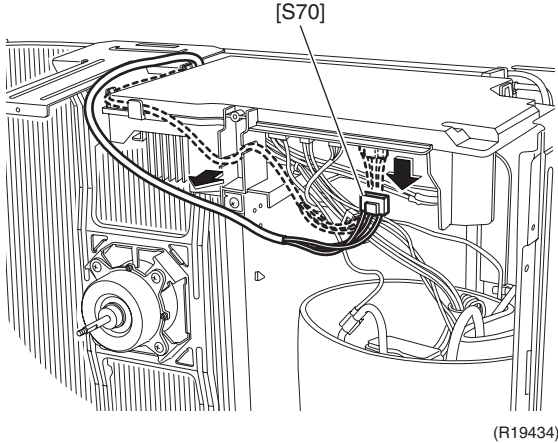
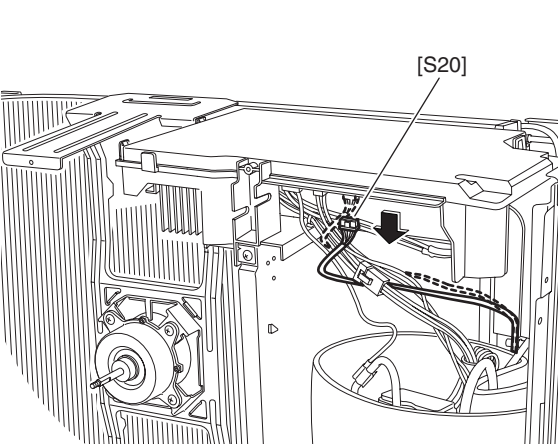
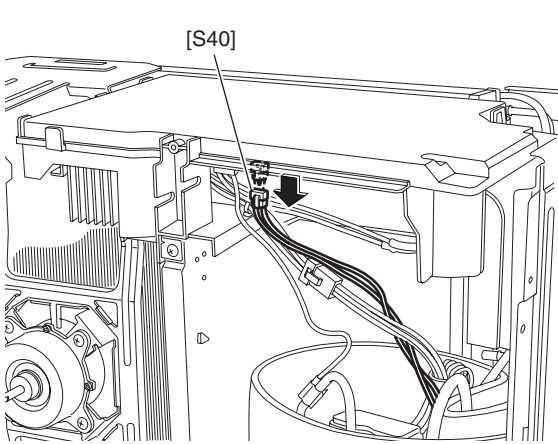
| Step | Procedure | Points |
|------|--|--|
| 4 | Remove the screw of the fan motor fixing frame. |  <p>(R19361)</p> |
| 5 | Unfasten the 2 hooks at the bottom and remove the fan motor fixing frame. | <ul style="list-style-type: none"> ■ Be careful so as not to damage the top part of the outdoor heat exchanger fins. |
| 6 | Open the 2 hooks and release the fan motor lead wire. | <ul style="list-style-type: none"> ■ When reassembling, put the fan motor lead wire through the back of the fan motor so as not to be entangled with the outdoor fan. |
| 7 | Remove the 4 screws and remove the fan motor. |  <p>Lead wire Outdoor fan (R3249)</p> <ul style="list-style-type: none"> ■ When reassembling, fit the lower hooks into the bottom frame. |
| | <p>Fan motor fixing frame</p>  <p>(R19432)</p> | |
| |  <p>Hook</p> <p>(R18433)</p> | |
| |  <p>Fan motor</p> <p>(R19433)</p> | |

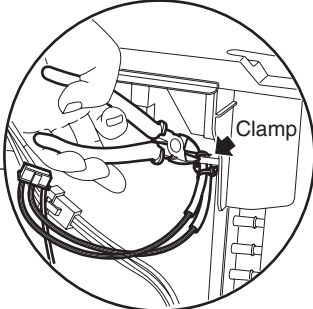
3. Electrical Box / PCB

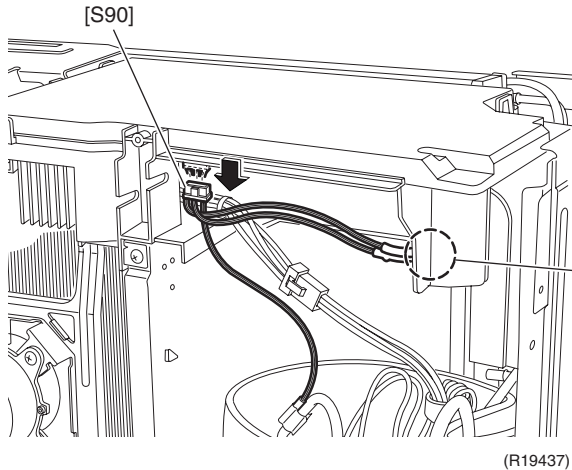


Warning

- ◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

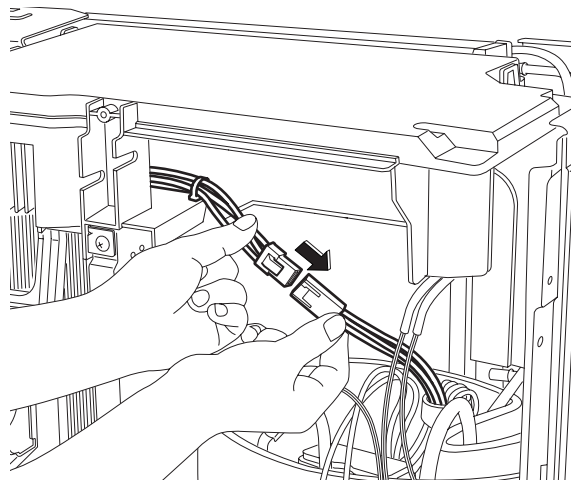
| Step | Procedure | Points |
|-----------------------------------|--|--|
| 1. Remove the electrical box. |  | [S70]: fan motor |
| 1 Disconnect the connector [S70]. |  | [S20]: electronic expansion valve coil |
| 2 Disconnect the connector [S20]. |  | [S40]: overload protector |
| 3 Disconnect the connector [S40]. | | |

| Step | Procedure | Points |
|------|--|---|
| 4 | Cut the clamp and disconnect the connector [S90]. |  |
| 5 | Disconnect the relay connector for the compressor. | [S90]: thermistors |
| 6 | Remove the screw and remove the stop valve cover. | Stop valve cover |

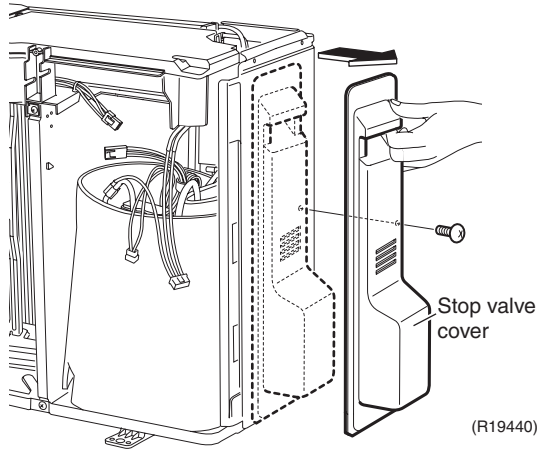


(R19437)

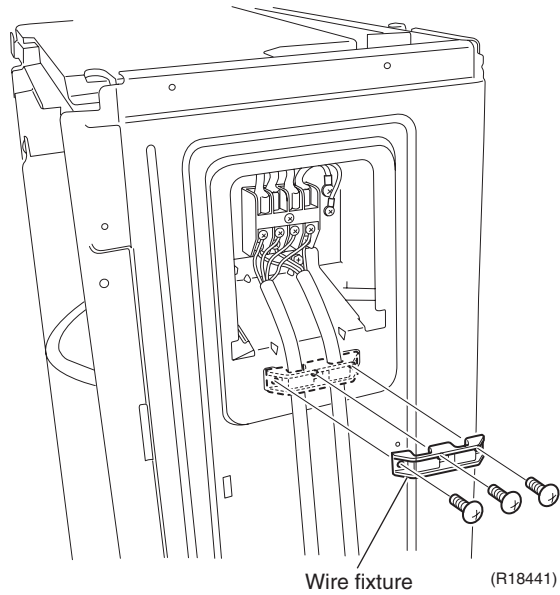
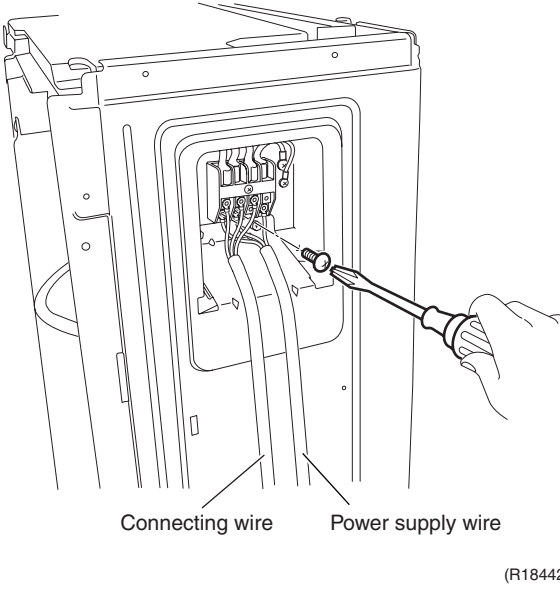
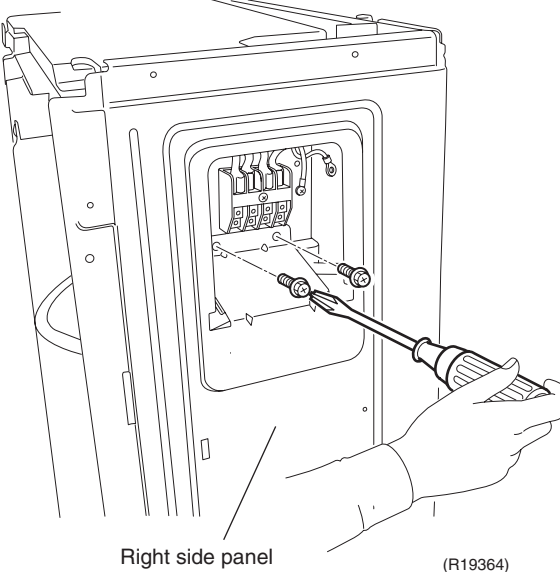
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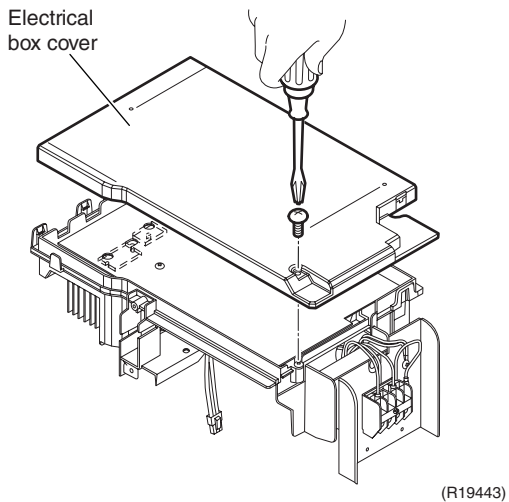
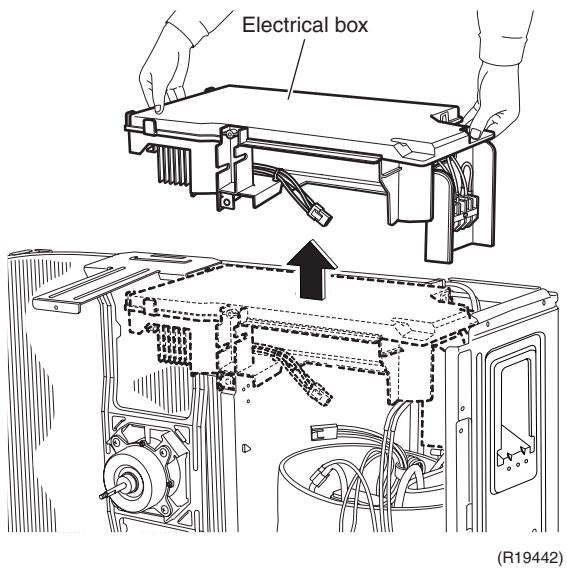
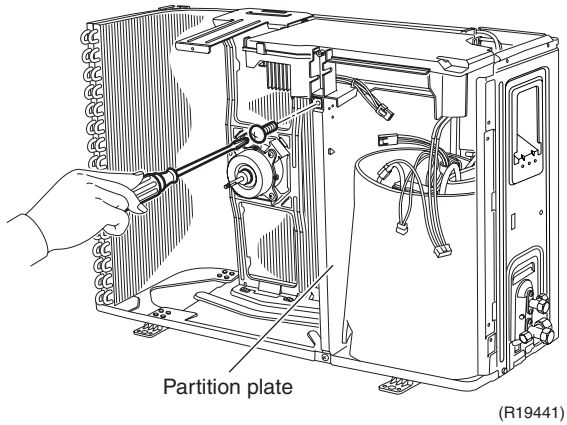
(R19438)



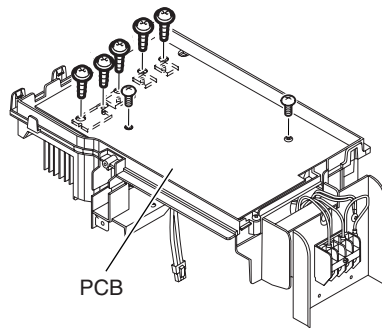
(R19440)

| Step | Procedure | Points |
|------|---|--------|
| 7 | Remove the 3 screws and remove the wire fixture. | |
| |  <p>Wire fixture (R18441)</p> | |
| 8 | Remove the 7 screws and disconnect the connecting wire and the power supply wire. | |
| |  <p>Connecting wire Power supply wire (R18442)</p> | |
| 9 | Remove the 2 screws on the right side panel. | |
| |  <p>Right side panel (R19364)</p> | |

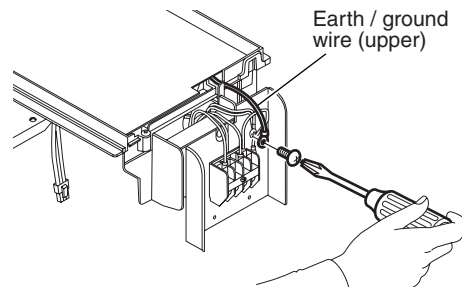
| Step | Procedure | Points |
|--------------------|---|--------|
| 10 | Remove the screw on the partition plate. | |
| 11 | Lift and remove the electrical box. | |
| 2. Remove the PCB. | 1 Remove the screw and remove the electrical box cover. | |



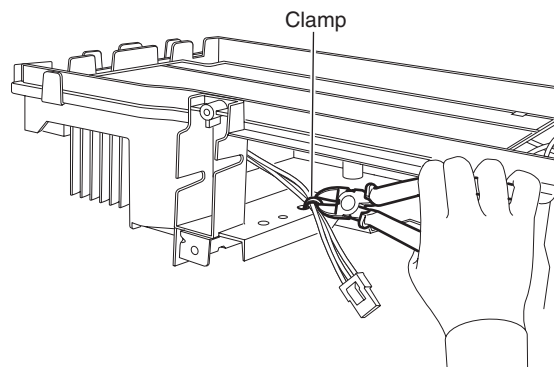
| Step | Procedure | Points |
|------|---|--------|
| 2 | Remove the 7 screws of the PCB. | |
| 3 | Remove the earth / ground screw (upper). | |
| 4 | Cut the clamp of the relay connector harness. | |
| 5 | Remove the PCB. | |



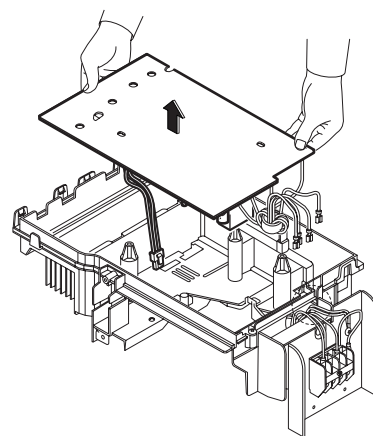
(R19444)



(R19445)



(R19439)



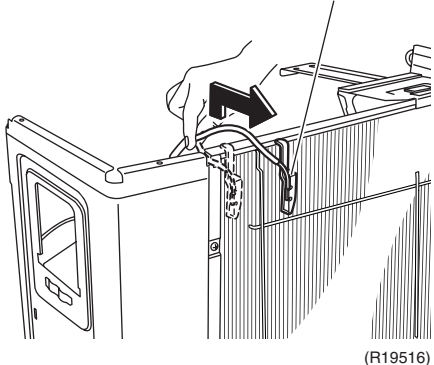
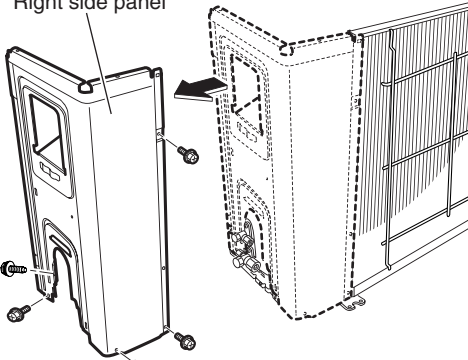
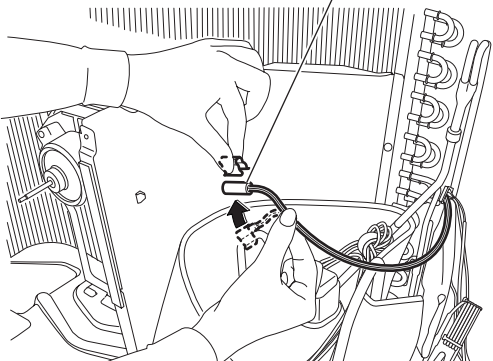
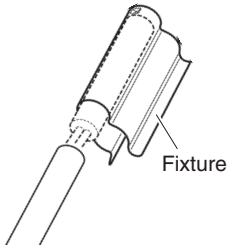
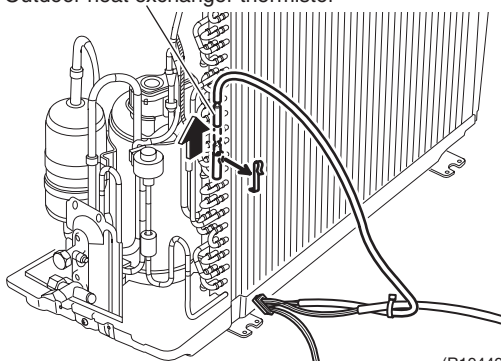
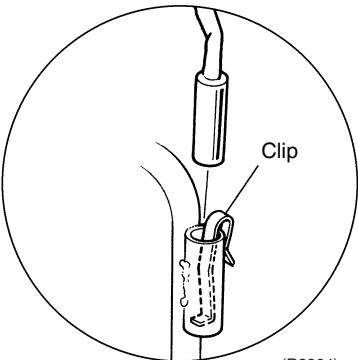
(R19446)

4. Thermistor ASSY



Warning

◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

| Step | Procedure | Points |
|------|--|--|
| 1 | Pull out the outdoor temperature thermistor. | Outdoor temperature thermistor  |
| 2 | Remove the 5 screws of the right side panel. | Right side panel  |
| 3 | Remove the right side panel. | ■ When reassembling, insert the 2 lower hooks and the upper hook of the back. |
| 4 | Release the discharge pipe temperature thermistor. | Discharge pipe temperature thermistor   |
| 5 | Pull out the outdoor heat exchanger thermistor and remove the thermistor ASSY. | Outdoor heat exchanger thermistor   |
| | | ■ Be careful not to lose the fixture for the thermistor. ■ Be careful not to lose the clip for the thermistor. |

5. Sound Blankets



Warning

- ◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

| Step | Procedure | Points |
|------|--|---|
| 1 | Untie the string and open the sound blanket (outer). | <ul style="list-style-type: none"> ■ Since the piping ports are torn easily, remove the sound blanket carefully. |
| 2 | Pull the sound blanket (outer) out. | |
| 3 | Remove the sound blanket (top). | |
| 4 | Pull the sound blanket (inner) out. | |
| 5 | Pull out the sound blanket (bottom). | |
| | <p style="text-align: center;">Sound blanket (outer)</p> <p style="text-align: right;">(R19450)</p> | |
| | <p style="text-align: center;">Sound blanket (top)</p> <p style="text-align: right;">(R19451)</p> | |
| | <p style="text-align: center;">Sound blanket (inner)</p> <p style="text-align: right;">(R19452)</p> | |
| | <p style="text-align: center;">Sound blanket (bottom)</p> <p style="text-align: right;">(R19453)</p> | |

6. Electronic Expansion Valve ASSY



Warning

- ◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.
- ◆ Be careful not to get yourself burnt with the pipes and other parts that are heated by the gas brazing machine.
- ◆ If the refrigerant gas leaks during work, ventilate the room. (If the refrigerant gas is exposed to flames, toxic gas may be generated.)
- ◆ Since it may happen that the refrigerant oil in the compressor catches fire, prepare wet cloth so as to extinguish fire immediately.



Caution

- ◆ From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.
- ◆ Restore the piping by non-oxidation brazing.



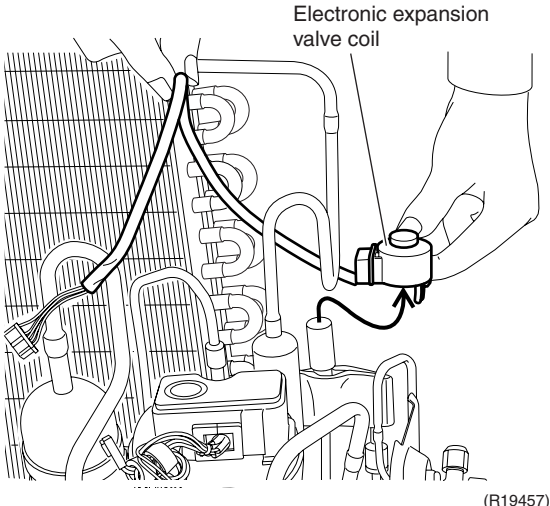
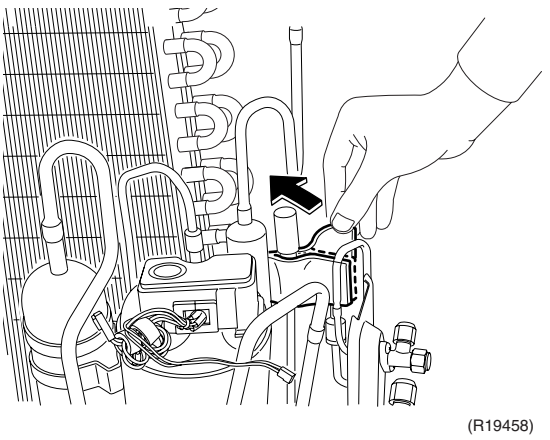
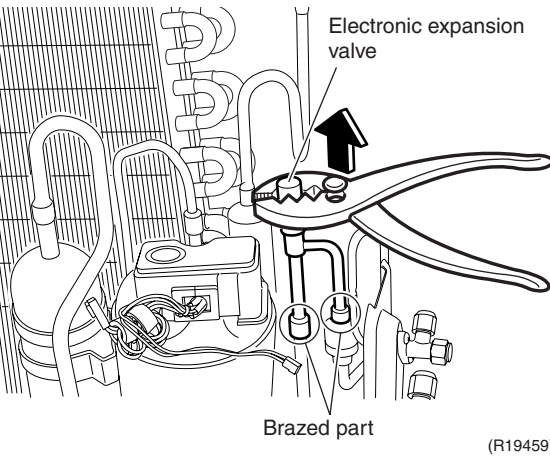
Note

- ◆ Before working, make sure that the refrigerant gas is empty in the circuit.
- ◆ Be sure to apply nitrogen replacement when heating up the brazed part.
- ◆ Do not use a metal saw for cutting pipes by all means because the sawdust comes into the circuit.
- ◆ When withdrawing the pipes, be careful not to pinch them firmly with pliers. The pipes may get deformed.
- ◆ Provide a protective sheet or a steel plate so that the brazing flame cannot influence peripheries.
- ◆ Be careful so as not to burn the compressor terminals, the name plate, the outdoor heat exchanger fin.
- ◆ In case of difficulty with gas brazing machine
 1. Disconnect the brazed part where is easy to disconnect and restore.
 2. Cut pipes on the main unit with a tube cutter in order to make it easy to disconnect.

| Step | Procedure | Points |
|------|---|--------|
| 1 | Remove the 2 screws and remove the partition plate. | |

Partition plate

(R19454)

| Step | Procedure | Points |
|------|---|--------|
| 2 | Pull out the electronic expansion valve coil. | |
| |  <p>Electronic expansion valve coil</p> <p>(R19457)</p> | |
| 3 | Remove the putty. | |
| |  <p>(R19458)</p> | |
| 4 | Heat up the 2 brazed parts and remove the electronic expansion valve. | |
| |  <p>Electronic expansion valve</p> <p>Brazed part</p> <p>(R19459)</p> | |

7. Compressor



Warning

- ◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.
- ◆ Be careful not to get yourself burnt with the pipes and other parts that are heated by the gas brazing machine.
- ◆ If the refrigerant gas leaks during work, ventilate the room. (If the refrigerant gas is exposed to flames, toxic gas may be generated.)
- ◆ Since it may happen that the refrigerant oil in the compressor catches fire, prepare wet cloth so as to extinguish fire immediately.



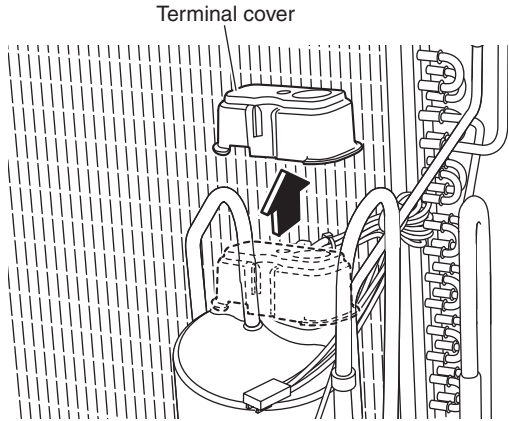
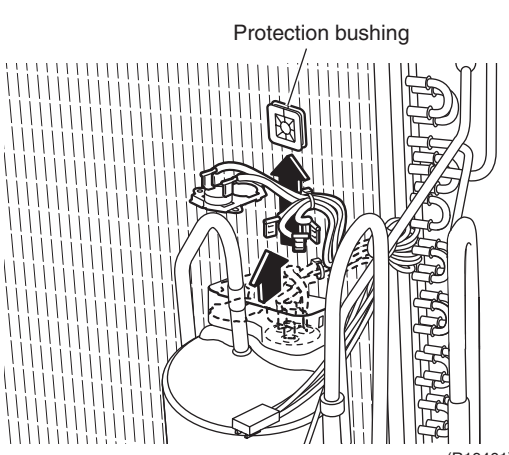
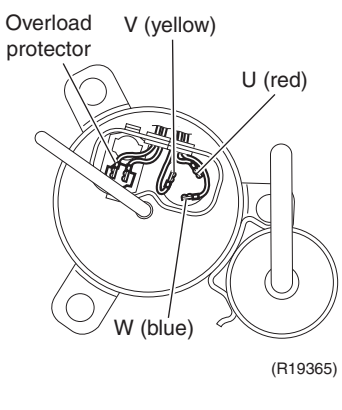
Caution

- ◆ From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.
- ◆ Restore the piping by non-oxidation brazing.

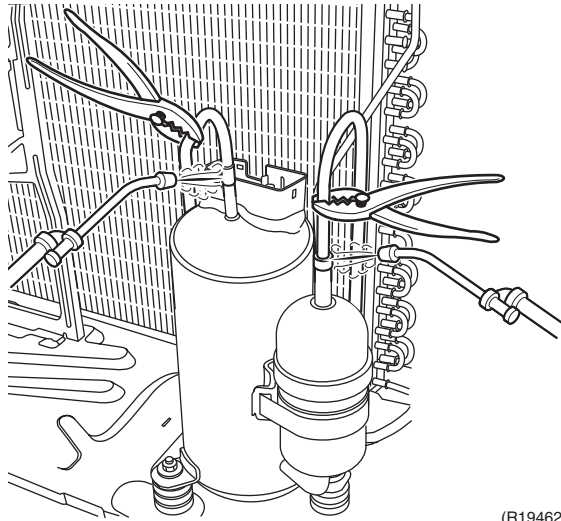


Note

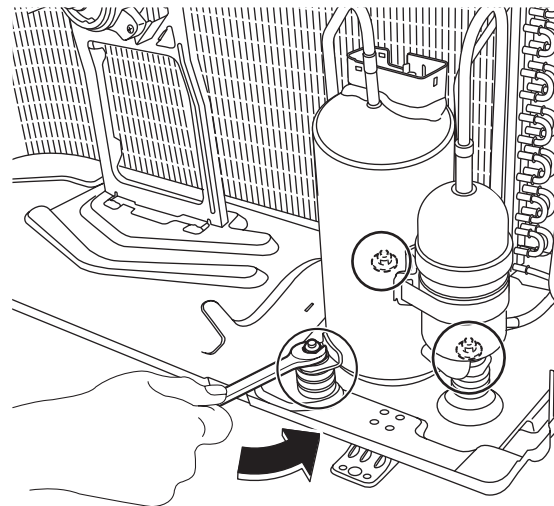
- ◆ Before working, make sure that the refrigerant gas is empty in the circuit.
- ◆ Be sure to apply nitrogen replacement when heating up the brazed part.
- ◆ Do not use a metal saw for cutting pipes by all means because the sawdust comes into the circuit.
- ◆ When withdrawing the pipes, be careful not to pinch them firmly with pliers. The pipes may get deformed.
- ◆ Provide a protective sheet or a steel plate so that the brazing flame cannot influence peripheries.
- ◆ Be careful so as not to burn the compressor terminals, the name plate, the outdoor heat exchanger fin.
- ◆ In case of difficulty with gas brazing machine
 1. Disconnect the brazed part where is easy to disconnect and restore.
 2. Cut pipes on the main unit with a tube cutter in order to make it easy to disconnect.

| Step | Procedure | Procedure | Points |
|--------|--|--|---|
| 1 | Remove the terminal cover. |  | |
| 2 3 | Remove the protection bushing. Disconnect the compressor lead wires and the overload protector. |  |  |

| Step | Procedure | Points |
|------|---|--------|
| 4 | Heat up the brazed part of the discharge side and disconnect. | |
| 5 | Heat up the brazed part of the suction side and disconnect. | |
| 6 | Remove the 3 nuts of the compressor. | |
| 7 | Lift the compressor up and remove it. | |



(R19462)



(R19463)

Revision History

| Month / Year | Version | Revised contents |
|--------------|-----------|------------------|
| 11 / 2013 | Si001355E | First edition |

Warning



- Daikin products are manufactured for export to numerous countries throughout the world. Prior to purchase, please confirm with your local authorised importer, distributor and/or retailer whether this product conforms to the applicable standards, and is suitable for use, in the region where the product will be used. This statement does not purport to exclude, restrict or modify the application of any local legislation.
- Ask a qualified installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Use only those parts and accessories supplied or specified by Daikin. Ask a qualified installer or contractor to install those parts and accessories. Use of unauthorised parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Read the User's Manual carefully before using this product. The User's Manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

If you have any enquiries, please contact your local importer, distributor and/or retailer.

Cautions on product corrosion

1. Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced.
2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided. If you need to install the outdoor unit close to the sea shore, contact your local distributor.

Dealer

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