


REMOVAL PROCEDURE



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

2.0/2.2/2.5/2.8/3.5 kW Class

-  Outdoor Unit
-  Inverter
-  Pair Type



Service Manual Removal Procedure

Outdoor Unit

●Cooling Only

RKM20QVMA

RKM25QVMA

RKM35QVMA

●Heat Pump

RXF25QVMA

RXF35QVMA

RXM20QVMA

RXM25QVMA

RXM35QVMA

RXV25QVMV

RXV35QVMV

RXV22RVLT

RXV28RVLT

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Note:

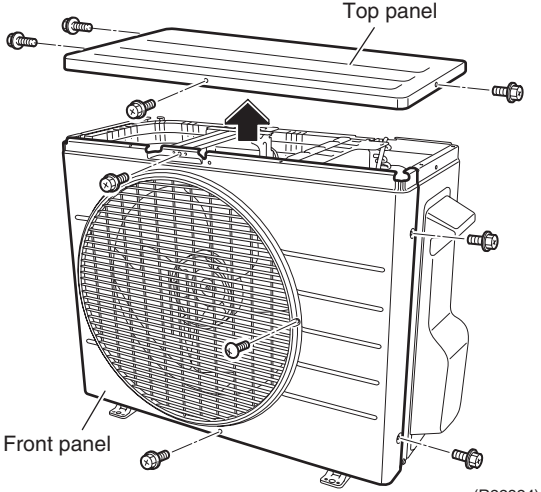
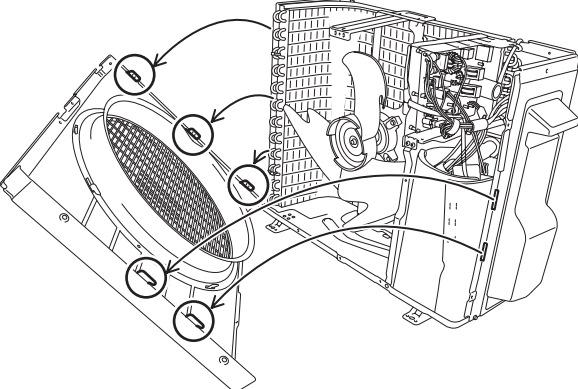
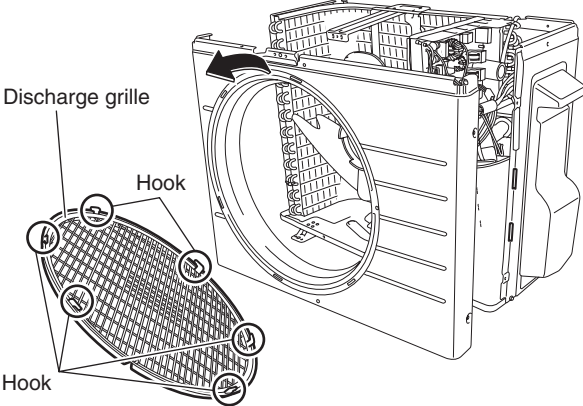
- ♦ The illustrations may be slightly different depending on the model.
- ♦ The illustrations are for heat pump models as representative.

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 then the top panel. |  <p>(R22824)</p> | |
| 2 | Remove the 5 screws of the front panel. | | |
| 3 | Lift up the left side of the front panel and unfasten the 3 hooks. | | |
| 4 | Unfasten the 2 right side hooks and remove the front panel. |  <p>(R22825)</p> | |
| 5 | Turn the discharge grille to the left to unfasten the 6 hooks. | | |
| 6 | Remove the discharge grille. |  <p>(R22826)</p> | |

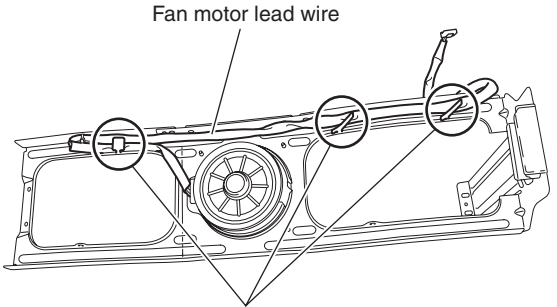
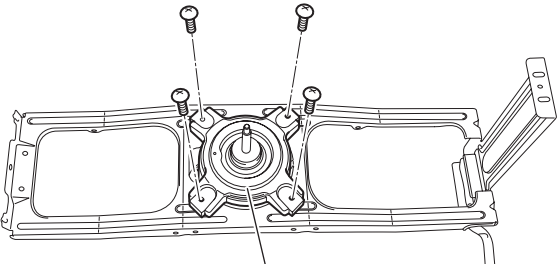
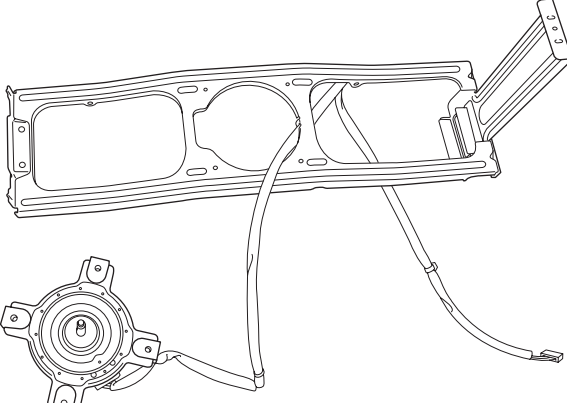
2. Outdoor Fan / Fan Motor



Warning

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

| Step | Procedure | Points |
|---|-----------|--|
| 1 Disconnect the connector [S70]. 2 Release the fan motor lead wire from the groove. | | [S70]: fan motor ■ When reassembling, put the fan motor lead wire through the back of the fan motor to avoid any entanglement with the outdoor fan. |
| 3 Remove the nut, and then the outdoor fan. | | ■ Nut size: M6 ■ When reassembling, align the ▼ mark of the outdoor fan with the D-cut section of the motor shaft. |
| 4 Remove the 2 screws, and then the fan motor fixing frame. | | ■ When reassembling, fit the 2 lower hooks into the bottom frame. |

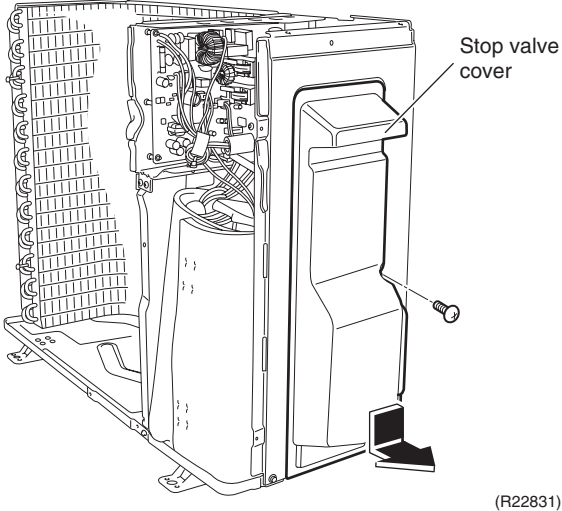
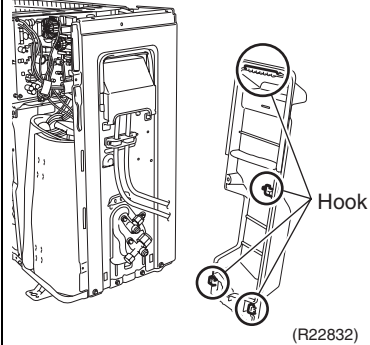
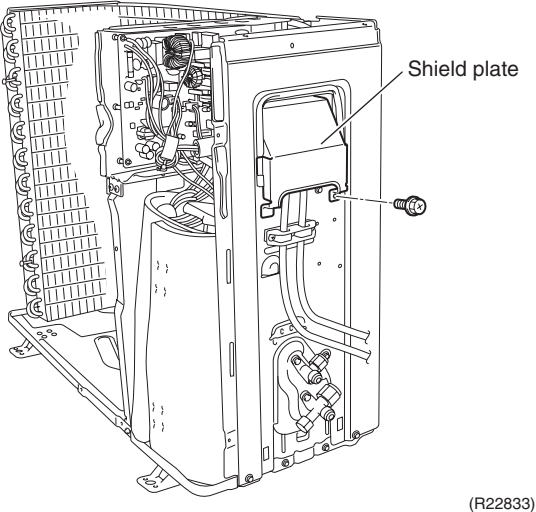
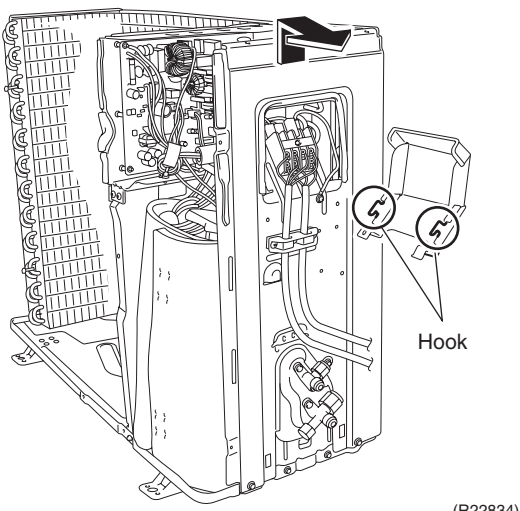
| Step | Procedure | Points |
|------|---|--------|
| 5 | Unfasten the 3 hooks on the fan motor fixing frame and release the fan motor lead wire. | |
| |  <p>Fan motor lead wire</p> <p>Hook</p> <p>(R21612)</p> | |
| 6 | Remove the 4 screws from the fan motor. | |
| |  <p>Fan motor</p> <p>(R24108)</p> | |
| 7 | Remove the fan motor. | |
| |  <p>(R22830)</p> | |

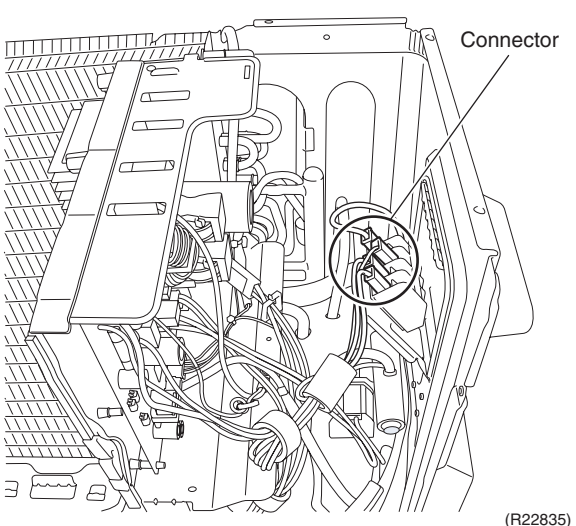
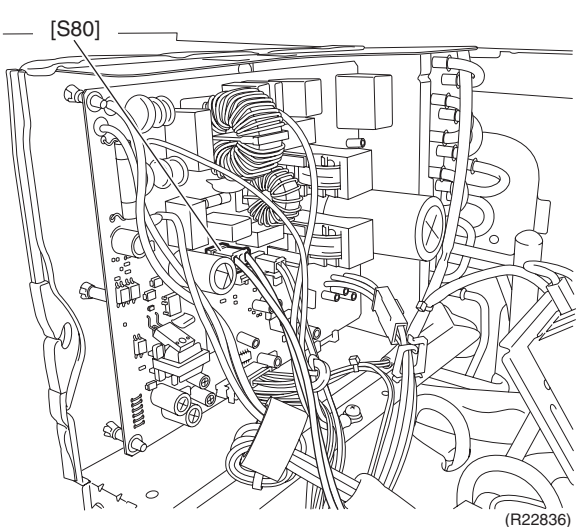
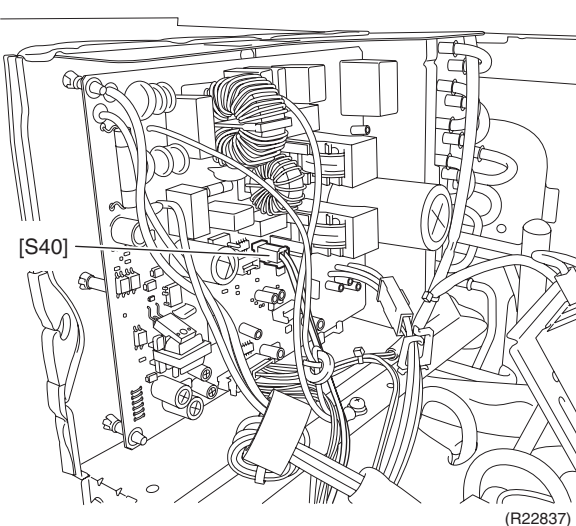
3. Electrical Box / PCB



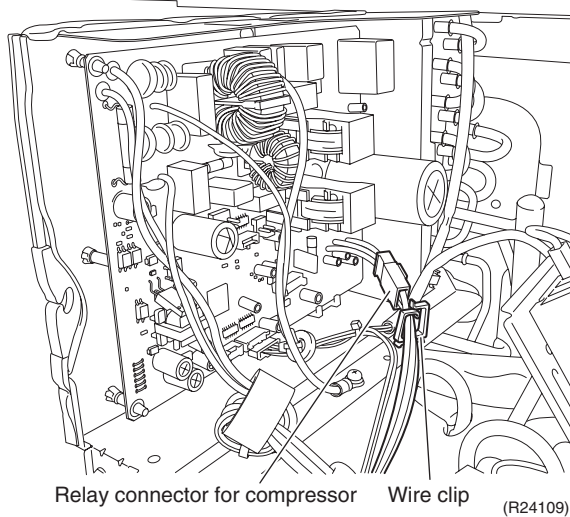
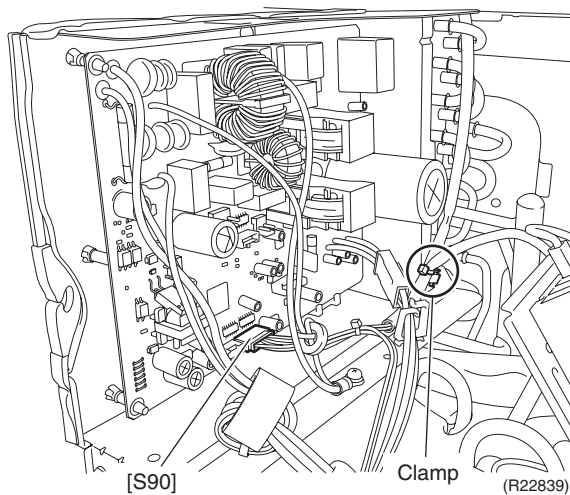
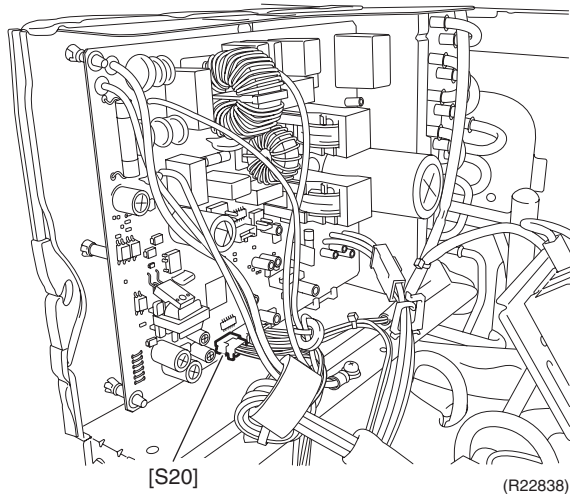
Warning

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

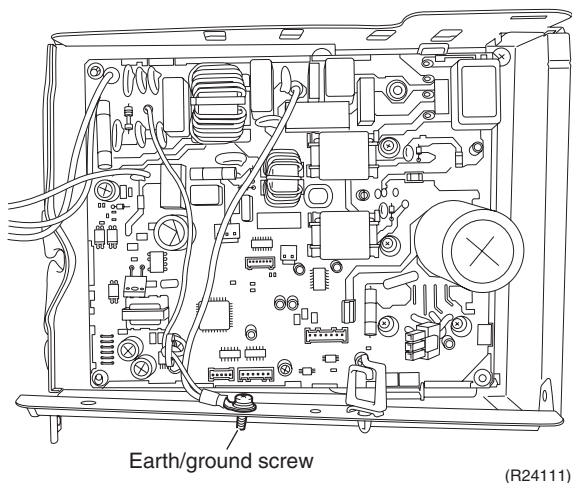
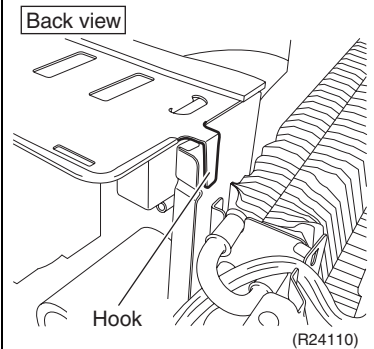
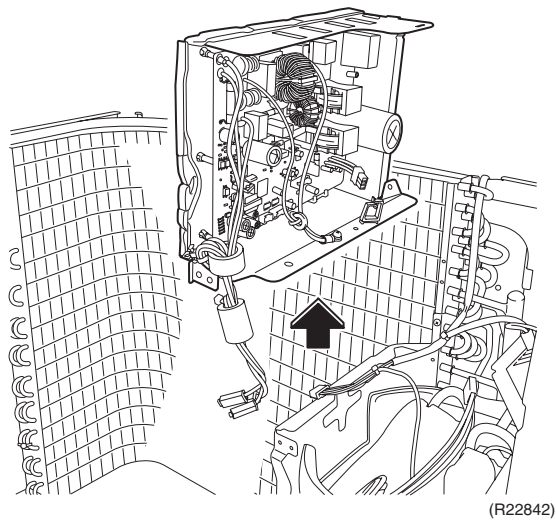
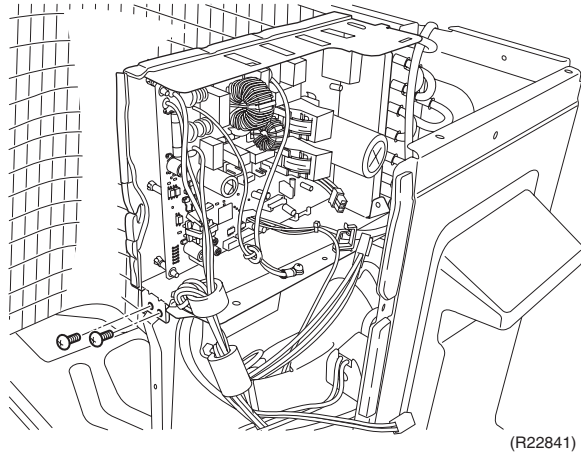
| Step | Procedure | Points |
|---|---|---|
| 1. Remove the shield plate. | <p data-bbox="150 409 443 472">1 Remove the screw of the stop valve cover.</p> <p data-bbox="150 510 437 607">2 Slide the stop valve cover downward and remove it.</p>  | <p data-bbox="1086 371 1437 434">■ When reassembling, make sure to fit the 4 hooks.</p>  |
| 3 Remove the screw of the shield plate. | <p data-bbox="150 931 443 994">3 Remove the screw of the shield plate.</p>  | |
| 4 Lift up the shield plate and unfasten the 2 hooks to remove it. | <p data-bbox="150 1491 451 1592">4 Lift up the shield plate and unfasten the 2 hooks to remove it.</p>  | |

| Step | Procedure | Points |
|-------------------------------|--|---|
| 2. Remove the electrical box. |  <p>(R22835)</p> | <p>1: black, back 2: white, back 3: red, front</p> |
| 1 2 | <p>1 Disconnect the 3 connectors from the terminal board.</p> <p>2 Disconnect the connector [S80].</p>  <p>(R22836)</p> | <p>[S80]: four way valve coil</p> <p>■ Cooling only models have no harness for [S80].</p> |
| 3 | <p>3 Disconnect the connector [S40].</p>  <p>(R22837)</p> | <p>[S40]: overload protector</p> |

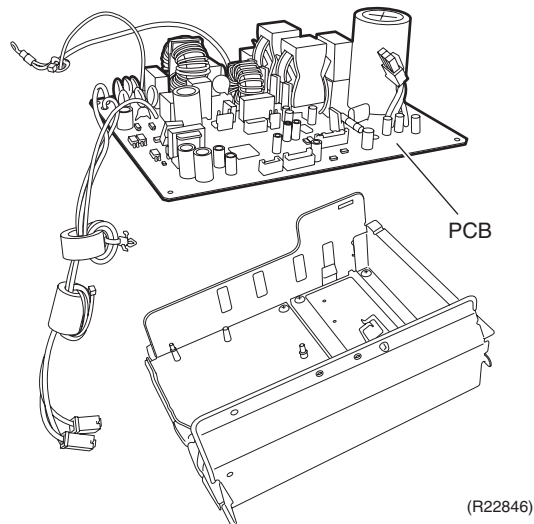
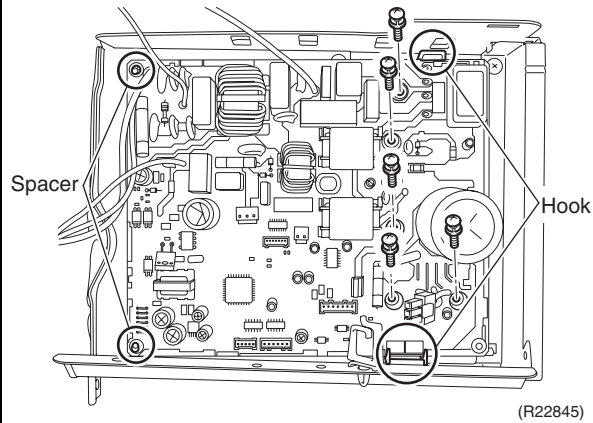
| Step | Procedure | Points |
|------|--|---|
| 4 | Disconnect the connector [S20]. | [S20]: electronic expansion valve coil |
| 5 | Disconnect the connector [S90] and pull out the clamp. | [S90]: thermistors |
| 6 | Disconnect the relay connector for compressor and remove the harness from the wire clip. | <ul style="list-style-type: none"> ■ When reassembling, make sure the compressor harness passes through the wire clip. |



| Step | Procedure | Points |
|--------------------|--|---|
| 7 | Remove the 2 screws of the electrical box. | |
| 8 | Lift up the electrical box and remove it. | <p>■ When reassembling, make sure to fit the rear hook.</p> |
| 3. Remove the PCB. | | |
| 1 | Remove the earth/ground screw. | |



| Step | Procedure | Points |
|------|---|--------|
| 2 | Remove the 5 screws of the PCB. | |
| 3 | Unfasten the 2 hooks and release the 2 spacers. | |
| 4 | Remove the PCB. | |

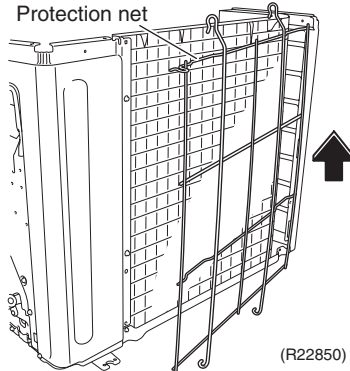
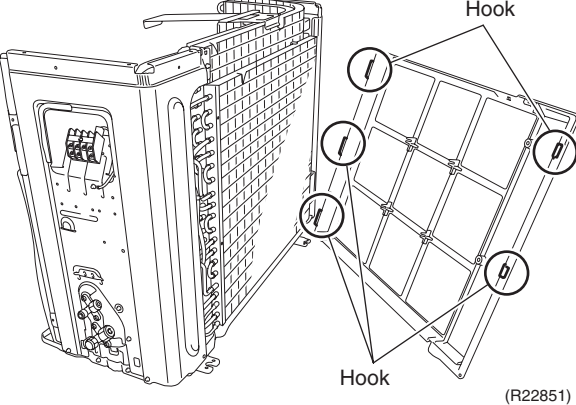


4. Suction Grille / Protection Net / Thermistor ASSY

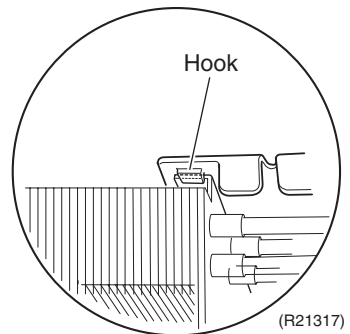
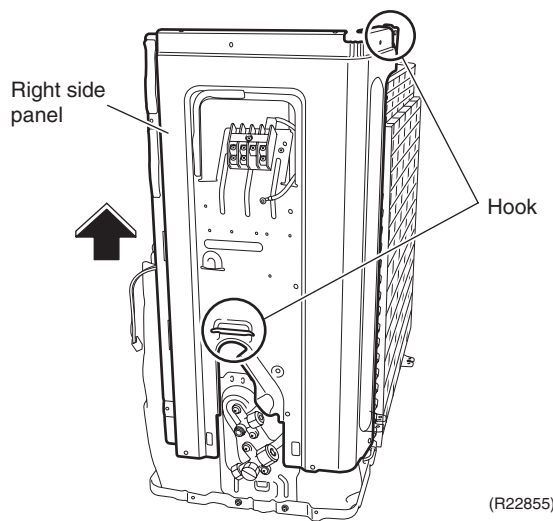
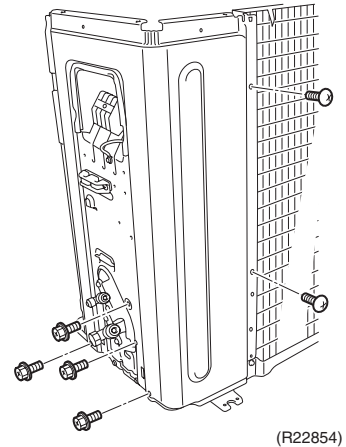
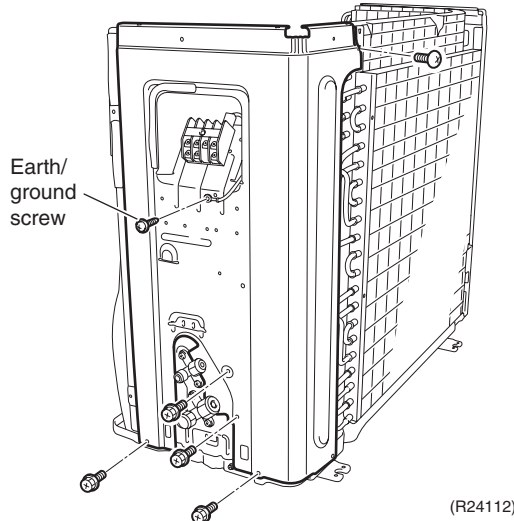
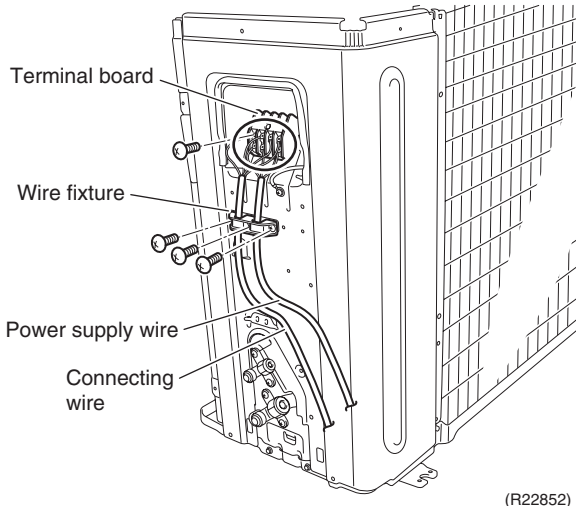


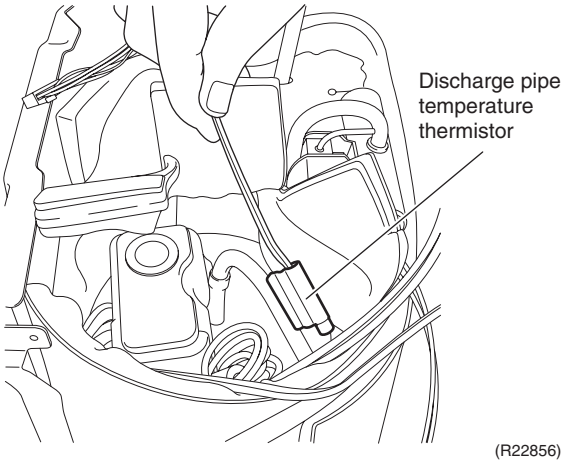
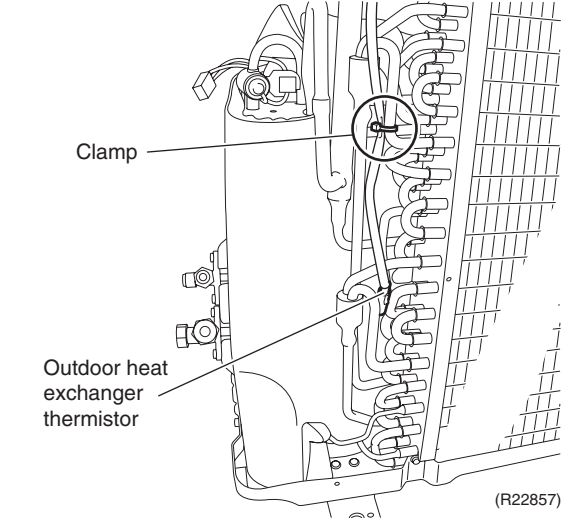
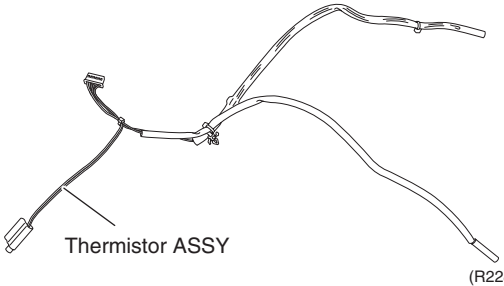
Warning

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

| Step | Procedure | Points |
|------|---|---|
| 1 | Remove the outdoor temperature thermistor from the suction grille (or from the protection net). | <ul style="list-style-type: none"> ■ When reassembling, make sure to pass the outdoor temperature thermistor through the top part of the heat exchanger first. |
| 2 | Remove the 3 screws, and then the suction grille. | <p>For models with protection net</p> <ul style="list-style-type: none"> ■ Lift up the protection net and remove it. |
| 3 | Slide the left side of the suction grille to the right and unfasten the 2 left hooks. |  |
| 4 | Unfasten the 3 right side hooks and remove the suction grille. |  |

| Step | Procedure | Points |
|------|---|--|
| 5 | Remove the 7 screws on the terminal board and disconnect the connecting wire and the power supply wire. | |
| 6 | Remove the 3 screws, and then the wire fixture. | |
| 7 | Remove the earth/ground screw. | For models with protection net |
| 8 | Remove the 5 screws. | ■ Remove the 6 screws. |
| 9 | Lift up the right side panel to unfasten the 2 hooks. | ■ When reassembling, make sure to fit the rear hook. |
| 10 | Remove the right side panel. | |



| Step | Procedure | Points |
|------|--|---|
| 11 | Open the sound blanket (top) and pull out the discharge pipe temperature thermistor. | <ul style="list-style-type: none"> ■ Be careful not to lose the fixture for the thermistor.  |
| 12 | Cut the clamp. | <ul style="list-style-type: none"> ■ The location of the thermistor is different depending on the model. |
| 13 | Pull out the outdoor heat exchanger thermistor and remove the thermistor ASSY. | <ul style="list-style-type: none"> ■ Be careful not to lose the clip for the thermistor.  |
| |  | |

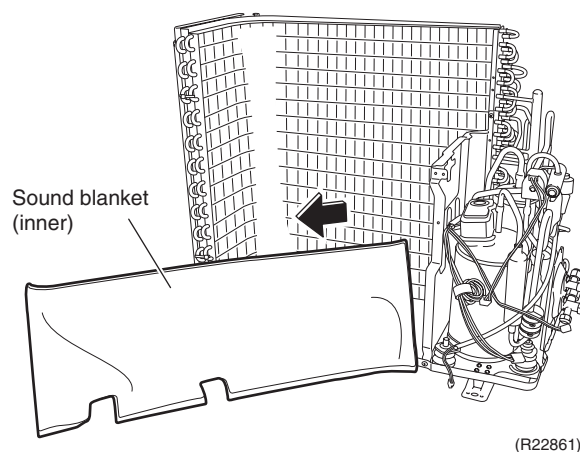
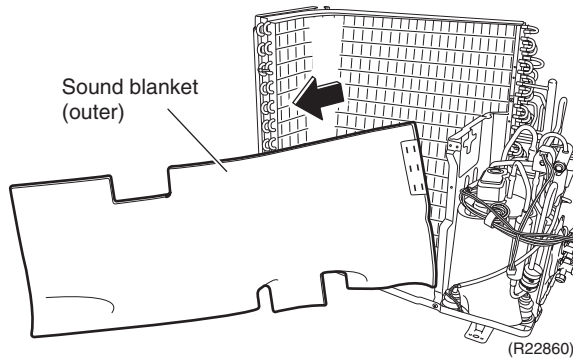
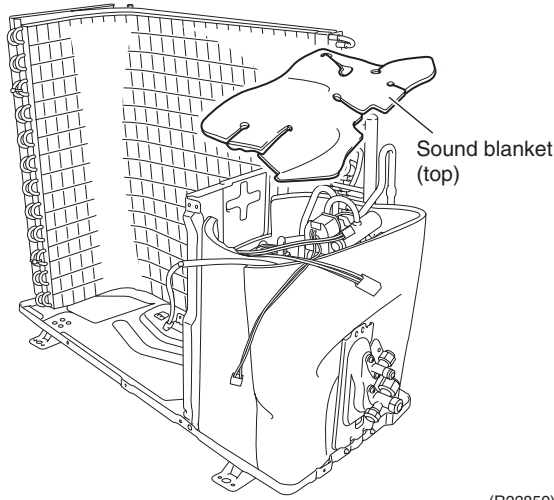
5. Sound Blankets



Warning

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

| Step | Procedure | Points |
|------|---|---|
| 1 | Remove the sound blanket (top). | <ul style="list-style-type: none"> ■ The design of the sound blankets varies depending on the model. ■ Since the piping ports on the sound blanket are torn easily, remove the blanket carefully. |
| 2 | Detach the fastener and pull out the sound blanket (outer). | |
| 3 | Pull out the sound blanket (inner). | |



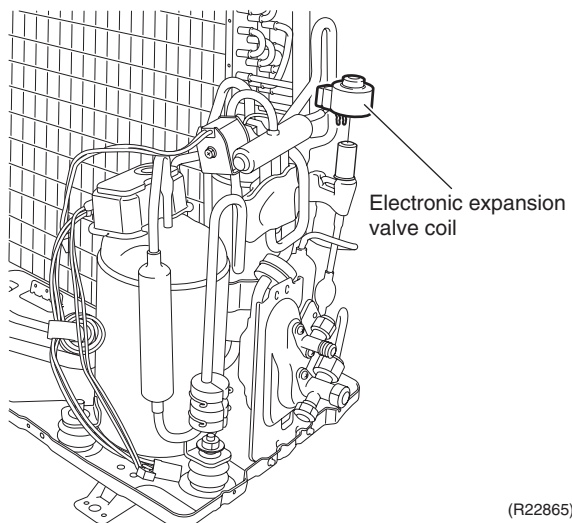
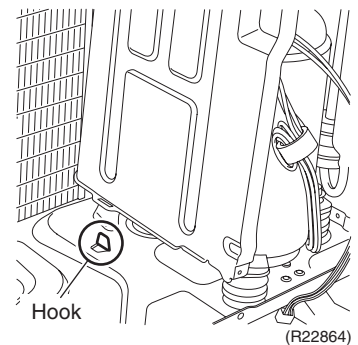
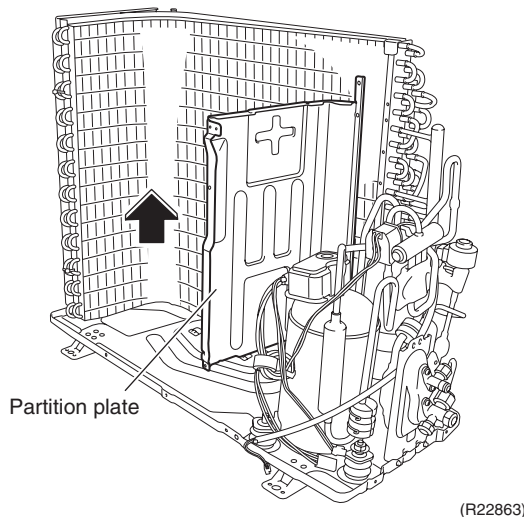
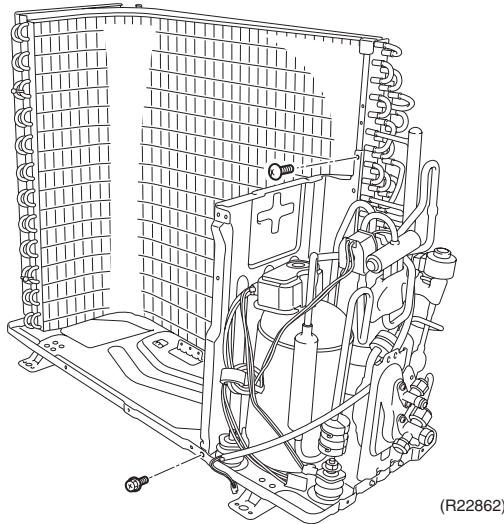
6. Partition Plate / Electronic Expansion Valve Coil



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 2 screws of the partition plate. | |
| 2 | Lift up the partition plate and remove it. | <ul style="list-style-type: none"> ■ When reassembling, fit the hook on the bottom frame. |
| 3 | Remove the electronic expansion valve coil. | |



7. Four Way Valve



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.)



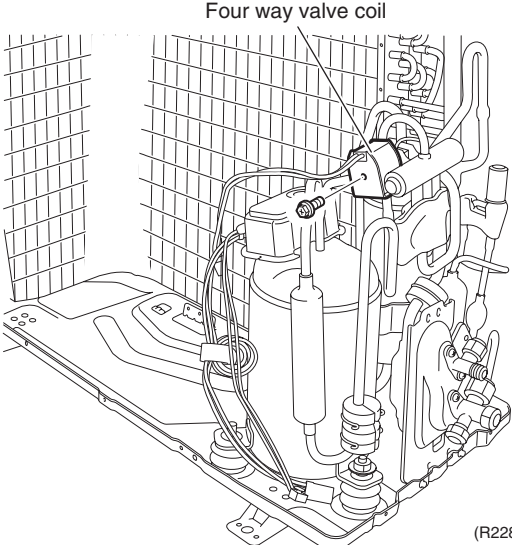
Caution

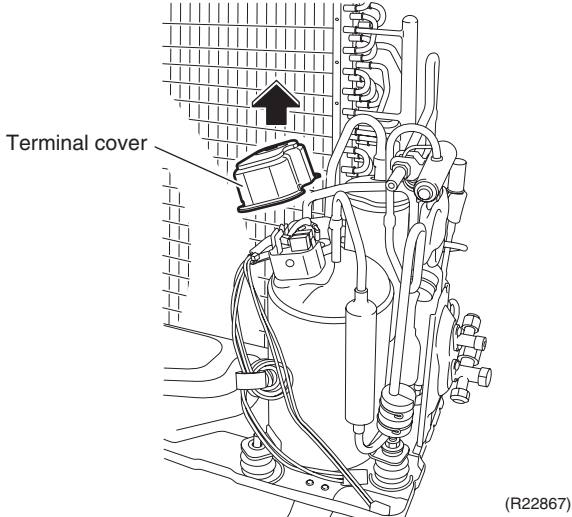
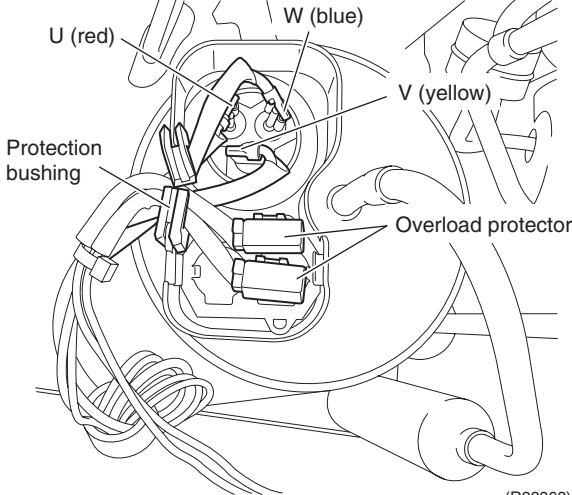
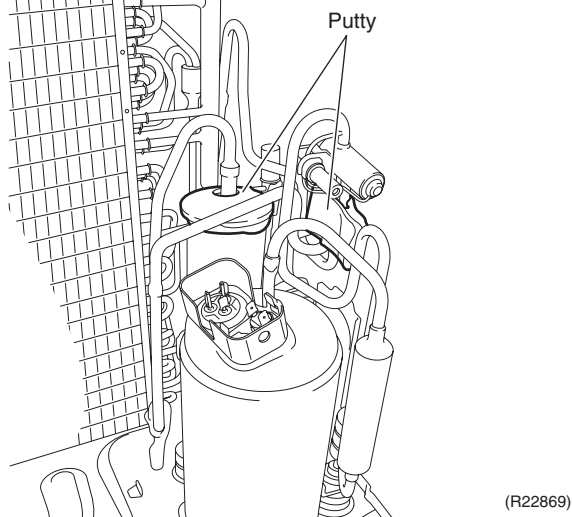
- ◆ From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.
- ◆ Cautions for restoration
 1. Restore the piping by non-oxidation brazing.
 2. It is required to prevent the carbonization of the oil inside the four way valve and the deterioration of the gaskets affected by heat. (Keep below 120°C (248°F).) For the sake of this, wrap the four way valve with wet cloth and provide water so that the cloth does not dry.



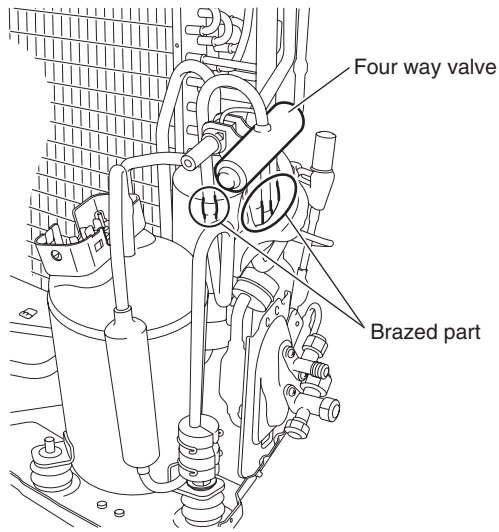
Note

- ◆ 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 screw, and then the four way valve coil. | <div style="text-align: center;">  <p>(R22866)</p> </div> |
| | | <ul style="list-style-type: none"> ■ Cooling only models have no four way valve coil. |

| Step | Procedure | Points |
|------|--|--------|
| 2 | <p>Remove the terminal cover.</p>  <p>Terminal cover</p> <p>(R22867)</p> | |
| 3 | <p>Remove the protection bushing.</p> | |
| 4 | <p>Disconnect the compressor lead wires (U, V, W) and the overload protector.</p>  <p>U (red)</p> <p>W (blue)</p> <p>V (yellow)</p> <p>Protection bushing</p> <p>Overload protector</p> <p>(R22868)</p> | |
| 5 | <p>Remove the 2 putties.</p>  <p>Putty</p> <p>(R22869)</p> | |

| Step | Procedure | Points |
|------|---|----------|
| 6 | Heat up the 4 brazed parts and remove the four way valve. | (R22870) |



8. 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.



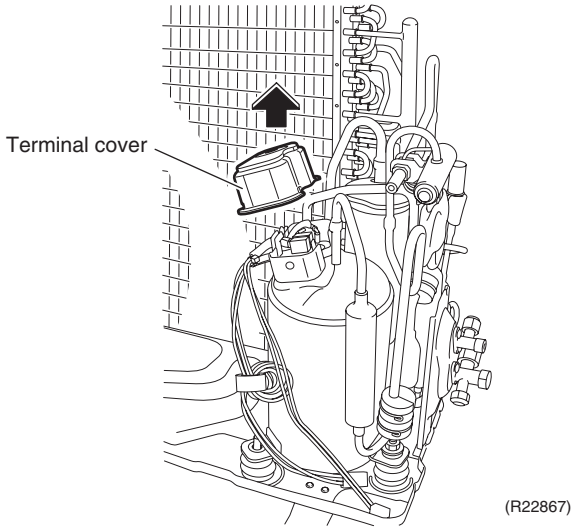
Caution

- ◆ 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.

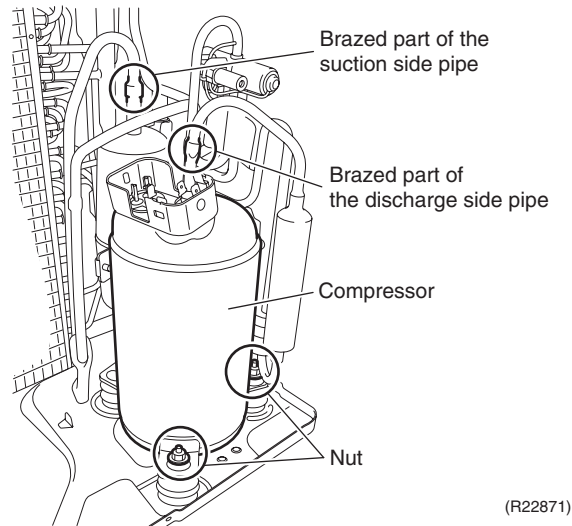
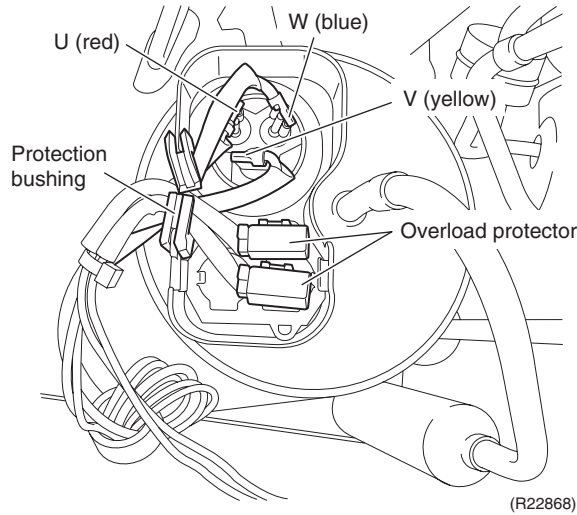


Note

- ◆ 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 | Points |
|-------------------------------------|--|--------|
| <p>1 Remove the terminal cover.</p> |  | |

| Step | Procedure | Points |
|------|--|--------|
| 2 | Remove the protection bushing. | |
| 3 | Disconnect the compressor lead wires (U, V, W) and the overload protector. | |
| 4 | Remove the putties. | |
| 5 | Heat up the brazed part of the discharge side pipe and disconnect it. | |
| 6 | Heat up the brazed part of the suction side pipe and disconnect it. | |
| 7 | Remove the 2 nuts. | |
| 8 | Lift up the compressor and remove it. | |



Revision History

| Month / Year | Version | Revised contents |
|--------------|------------|--|
| 02 / 2016 | Si001653E | First edition |
| 11 / 2016 | Si001653EA | Model addition: RXF25/35QVMA, RXV22/28RVLT |

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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