



REMOVAL PROCEDURE

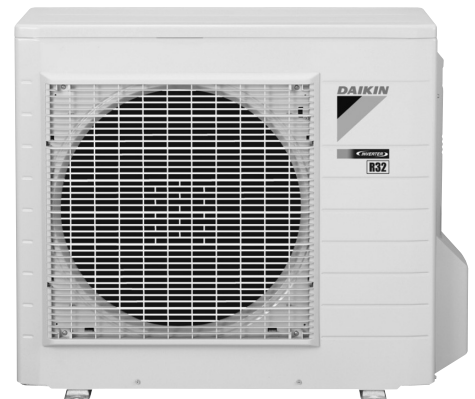


SERVICE
MANUAL

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

4.1/4.2/4.6/5.0/6.0/6.3 kW Class

-  Outdoor Unit
-  Inverter
-  Pair Type



Service Manual Removal Procedure

Outdoor Unit

●Cooling Only

**RKM46PVMA
RKM50PVMA
RKM60PVMA**

●Heat Pump

RXJ41NVLT

RXJ50LV1B

RXJ50NVMV

RXJ50PVMA

RXM42LV1B

RXM50LV1B

RXM41NVLT

RXM50NVLT

RXM46PVMA

RXM50PVMA

RXM60PVMA

RXV41NVLT

RXV50NVLT

RXV63NVLT

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Note:

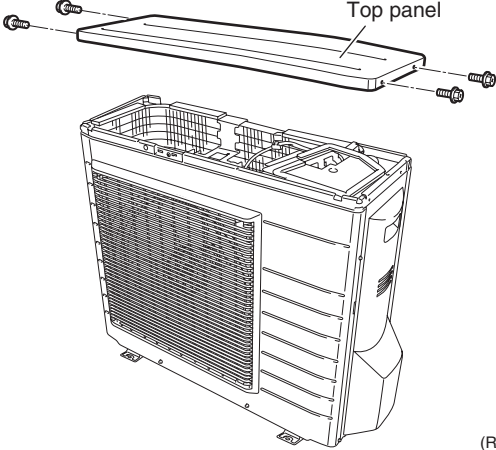
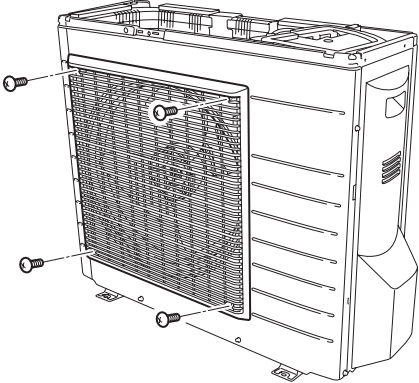
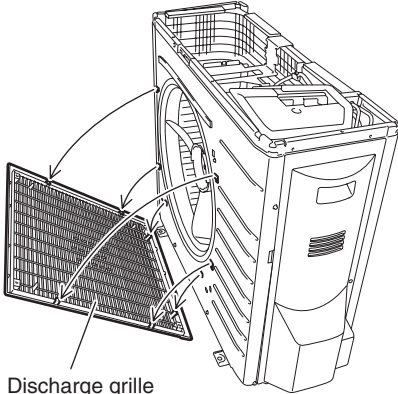
- The illustrations may be slightly different depending on the model.
- The illustrations are for heat pump models as representative.

1. Outer Panels

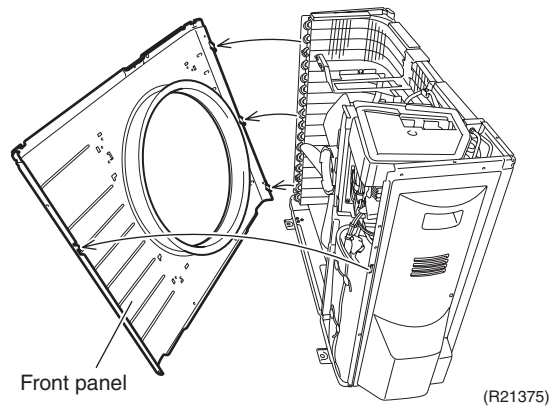
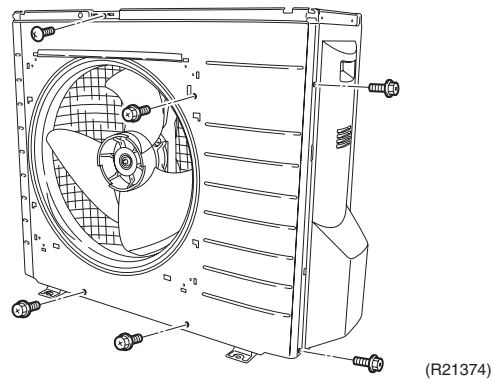


Warning

- ♦ 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 remove the top panel.  <p style="text-align: right;">(R21371)</p>	
2	Remove the 4 screws.  <p style="text-align: right;">(R21372)</p>	
3	Unfasten the 6 hooks and remove the discharge grille.  <p style="text-align: right;">(R21373)</p>	

Step	Procedure	Points
4	Remove the 6 screws.	
5	Unfasten the 4 hooks and remove the front panel.	

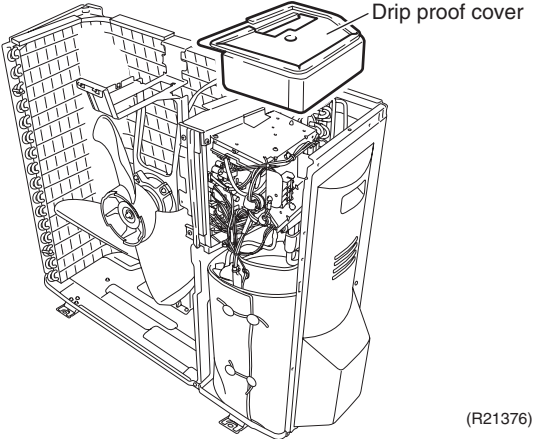
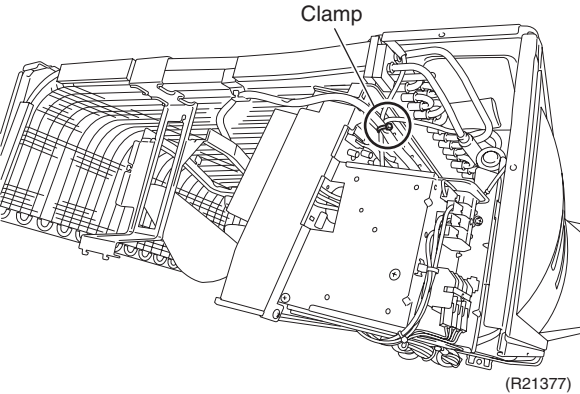
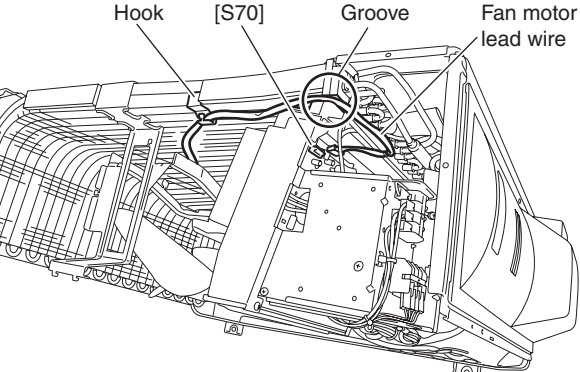


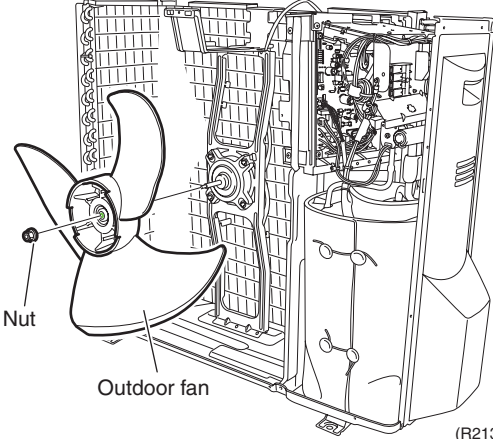
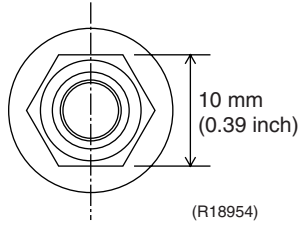
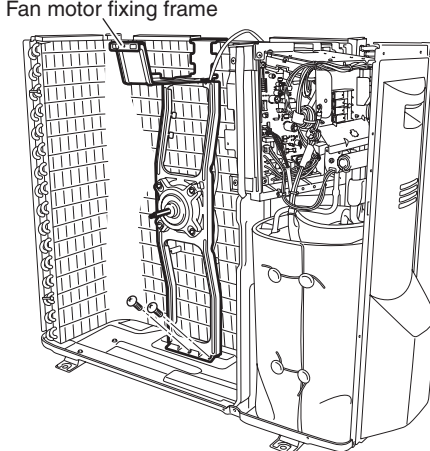
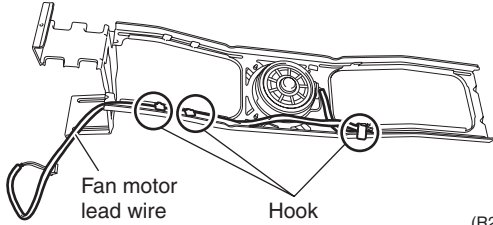
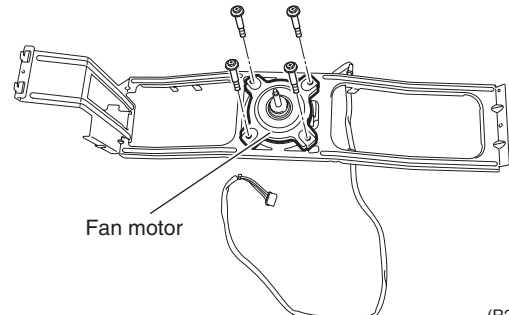
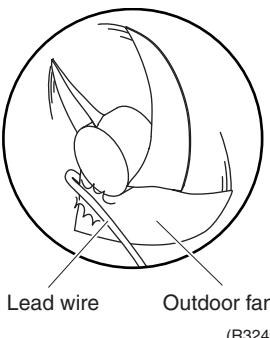
2. Outdoor Fan / Fan Motor



Warning

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

Step	Procedure	Procedure	Points
1	Remove the drip proof cover.	 <p>Drip proof cover</p> <p>(R21376)</p>	
2	Cut the clamp.	 <p>Clamp</p> <p>(R21377)</p>	
3	Disconnect the connector [S70].	 <p>Hook</p> <p>[S70]</p> <p>Groove</p> <p>Fan motor lead wire</p> <p>(R21378)</p>	[S70]: fan motor
4	Release the fan motor lead wire from the groove and the hook.		

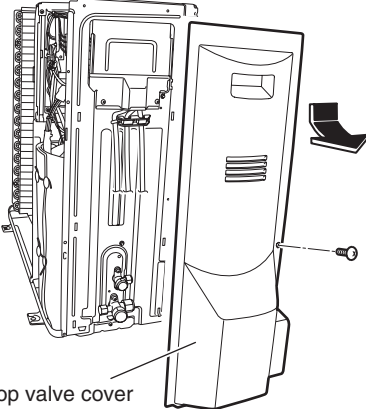
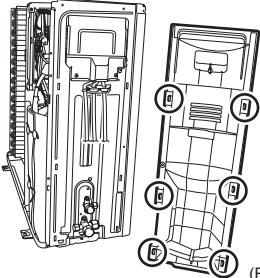
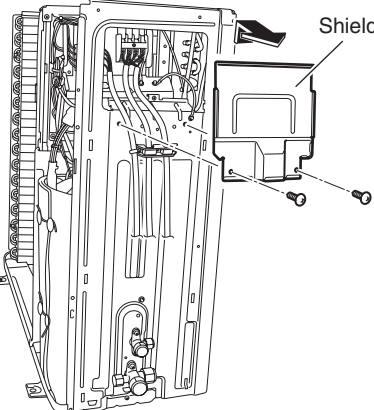
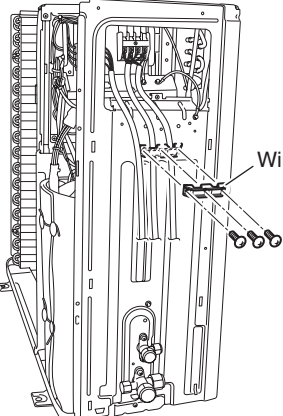
Step	Procedure	Procedure	Points
5	Remove the nut and remove the outdoor fan.	 <p>(R21379)</p>	<p>■ Nut size : M6</p>  <p>(R18954)</p> <p>■ When reassembling, align the ▼ mark of the outdoor fan with the D-cut section of the motor shaft.</p>
6	Remove the 2 screws and remove the fan motor fixing frame.	 <p>(R21380)</p>	
7	Open the 3 hooks and release the fan motor lead wire.	 <p>(R21381)</p>	<p>■ 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.</p>
8	Remove the 4 screws and remove the fan motor.	 <p>(R21382)</p>	 <p>(R3249)</p>

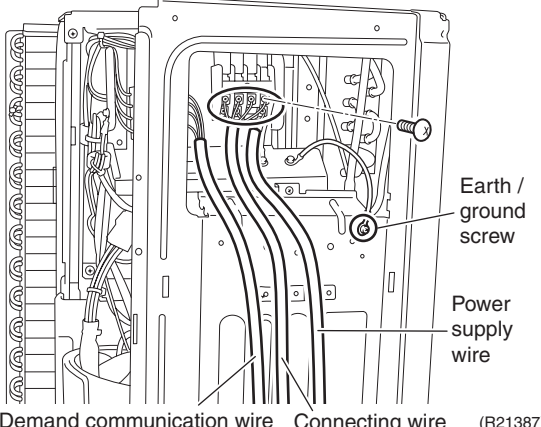
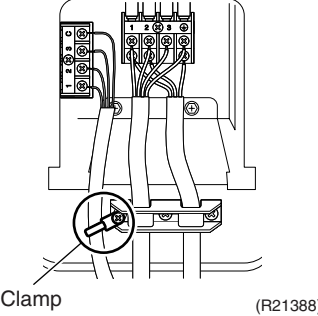
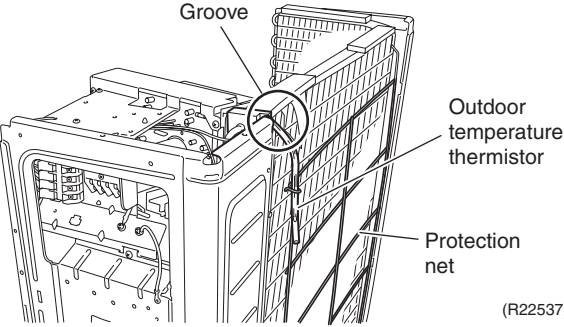
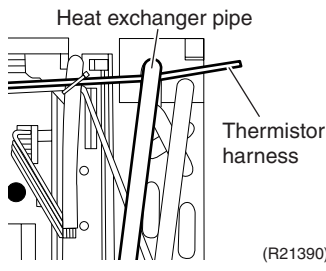
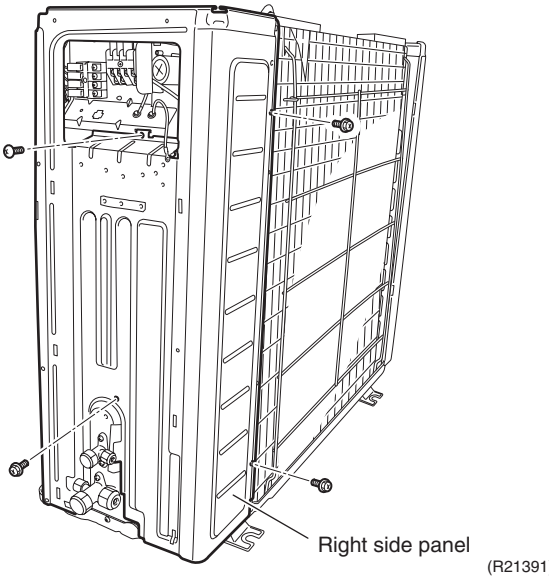
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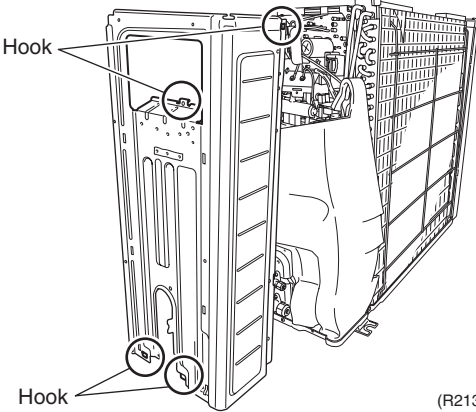
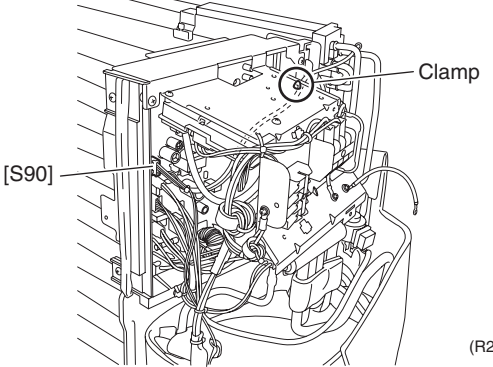
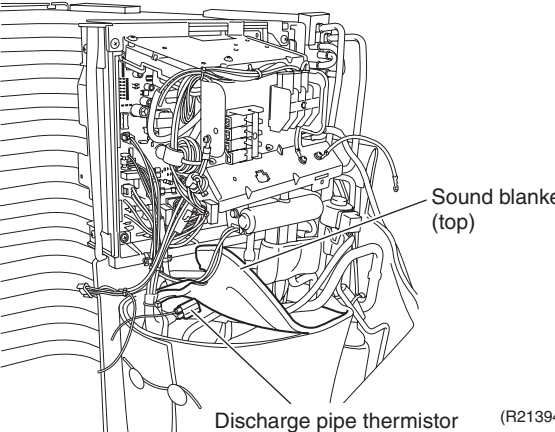
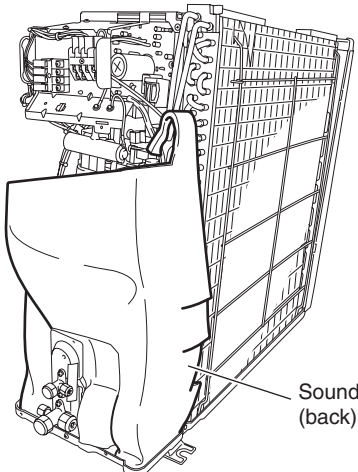
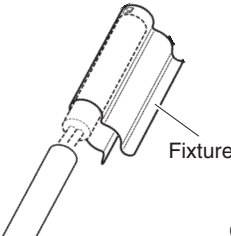


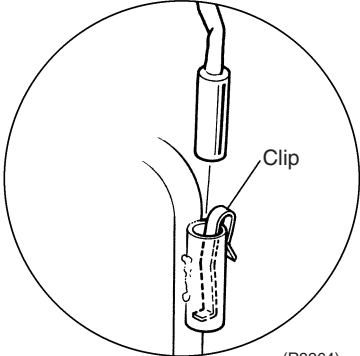
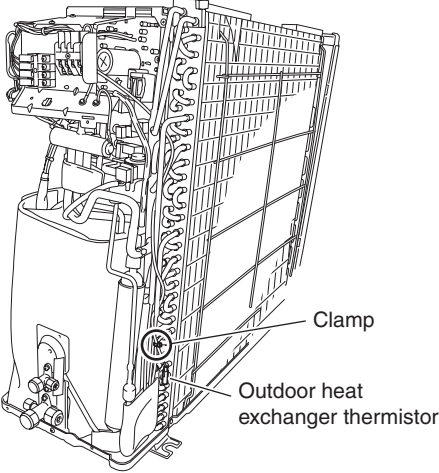
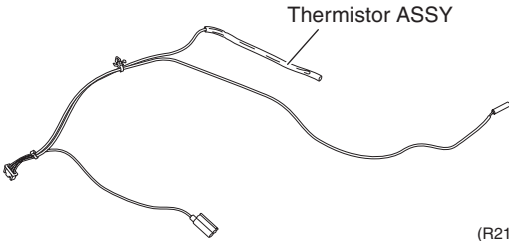
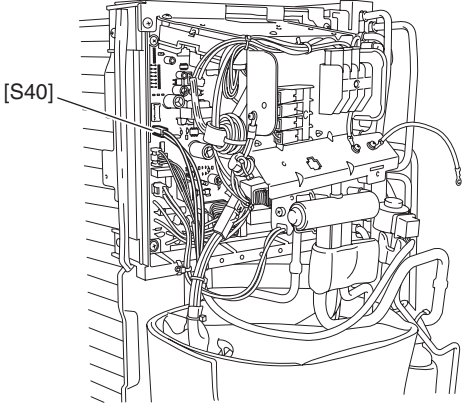
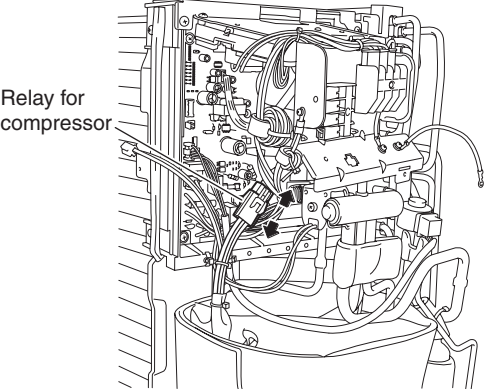
Warning

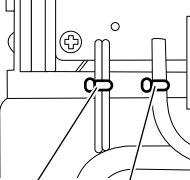
◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

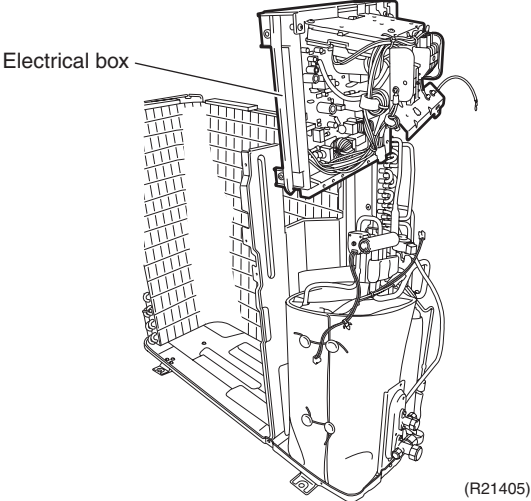
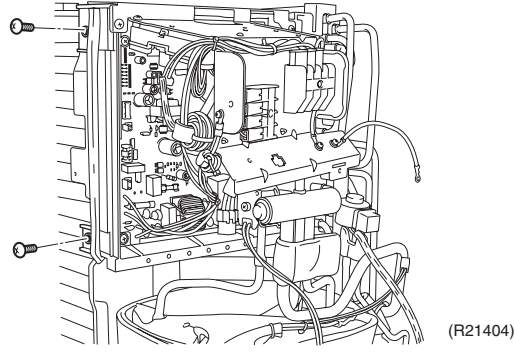
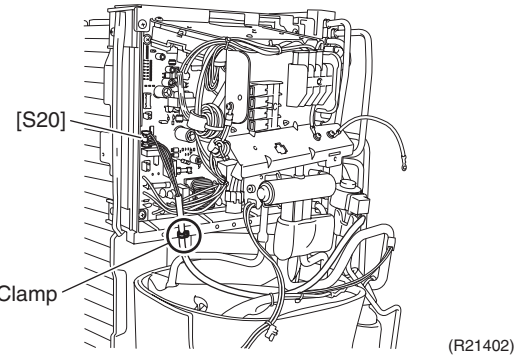
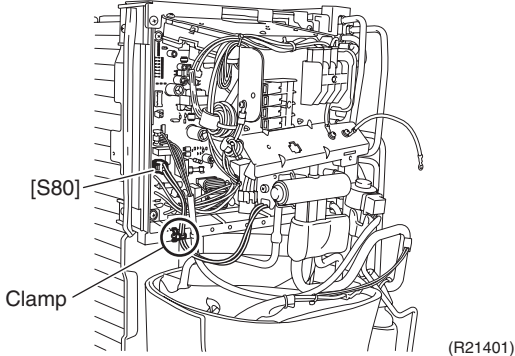
Step	Procedure	Points
1. Remove the right side panel.	 <p>Stop valve cover (R21383)</p>	<p>■ When reassembling, make sure to fit the 6 hooks.</p>  <p>(R21384)</p>
1 Remove the screw. 2 Pull down and remove the stop valve cover.	 <p>Shield plate (R21385)</p>	
3 Remove the 2 screws. 4 Slide upward and remove the shield plate.	 <p>Wire fixture (R21386)</p>	

Step		Procedure	Points
<p>6 Remove the 7 screws and detach the connecting wire and the power supply wire.</p> <p>7 Remove the 4 screws and detach the demand communication wire.</p> <p>8 Remove the screw and detach the earth / ground wire.</p>			<ul style="list-style-type: none"> When reassembling, fasten the demand communication wire with the clamp to the wire fixture.  <ul style="list-style-type: none"> Some models have no demand communication wire.
<p>9 Pull out the outdoor temperature thermistor from the protection net and the groove.</p>			<ul style="list-style-type: none"> When reassembling, pass the thermistor harness through between the heat exchanger pipes as below. 
<p>10 Remove the 4 screws and remove the right side panel.</p>			

Step	Procedure	Points
	 <p>(R21392)</p>	<ul style="list-style-type: none"> When reassembling, make sure to fit the 4 hooks.
<p>2. Remove the thermistor ASSY.</p>		<p>[S90]: thermistors</p>
<p>1 Disconnect the connector [S90].</p>		
<p>2 Pull out the clamp.</p>	 <p>(R21393)</p>	
<p>3 Slightly open the sound blanket (top) and detach the discharge pipe thermistor.</p>	 <p>Sound blanket (top)</p> <p>Discharge pipe thermistor</p> <p>(R21394)</p>	<ul style="list-style-type: none"> Be careful not to lose the fixture for the thermistor.
<p>4 Remove the sound blanket (back).</p>	 <p>Sound blanket (back)</p> <p>(R21396)</p>	
		 <p>(R21395)</p>

Step	Procedure	Points
5	Cut the clamp.	<ul style="list-style-type: none"> Be careful not to lose the clip for the thermistor.
6	Pull out the outdoor heat exchanger thermistor.	 <p style="text-align: right;">(R3264)</p>
7	Remove the thermistor ASSY.	
3. Remove the electrical box.	 <p style="text-align: right;">(R21397)</p>  <p style="text-align: right;">(R21398)</p>	[S40]: overload protector
1	Disconnect the connector [S40].	<ul style="list-style-type: none"> When reassembling, connect the connectors in the following order. <ol style="list-style-type: none"> (1) [S20] (2) [S80] (3) relay connector for compressor (4) [S40]
2	Disconnect the relay connector for the compressor.	
	 <p style="text-align: right;">(R25521)</p>  <p style="text-align: right;">(R25522)</p>	

Step	Procedure	Points
3	Disconnect the connector [S80].	[S80]: four way valve coil
4	Pull out the clamp.	<ul style="list-style-type: none"> ■ The cooling only models have no harness for the connector [S80] nor four way valve coil.
5	Disconnect the connector [S20].	[S20]: electronic expansion valve coil
6	Pull out the clamp.	<ul style="list-style-type: none"> ■ When reassembling, insert the clamps of harnesses as below.
7	Remove the 2 screws.	 <p>[S80] [S20] (R21403)</p>
8	Remove the electrical box.	

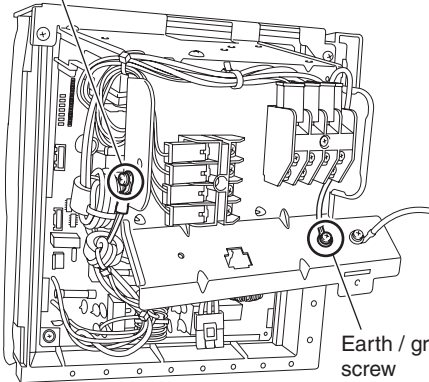
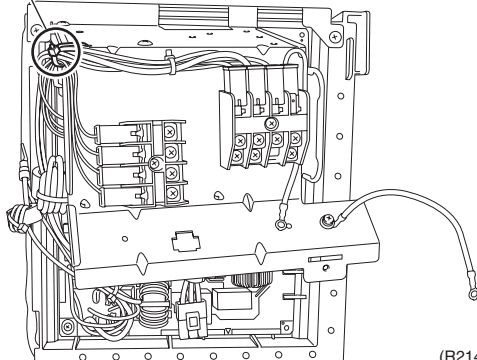
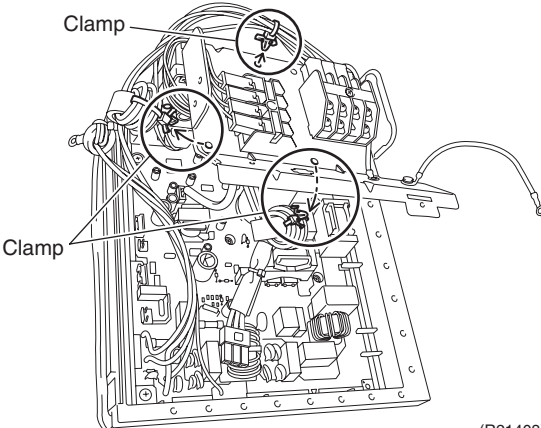


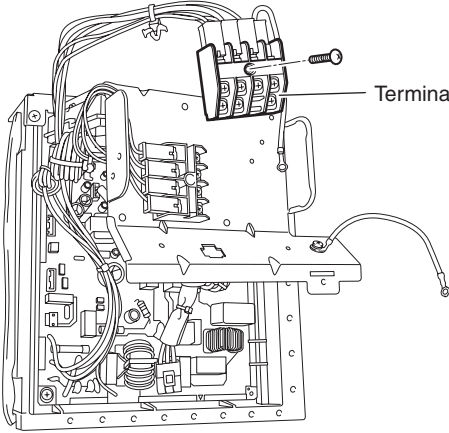
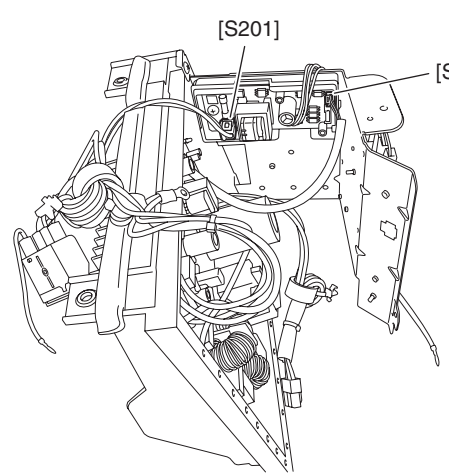
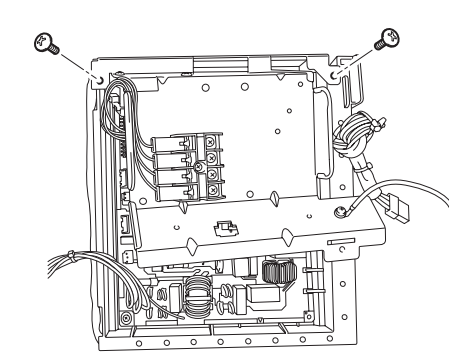
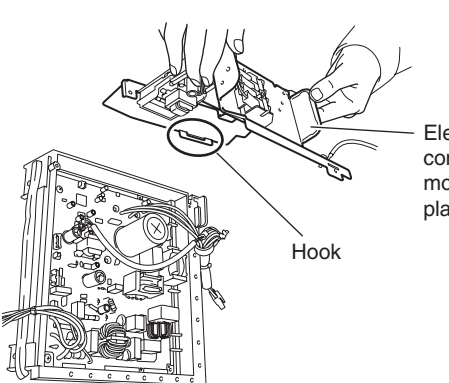
4. PCBs

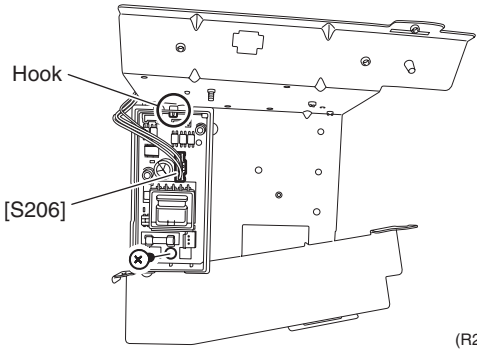
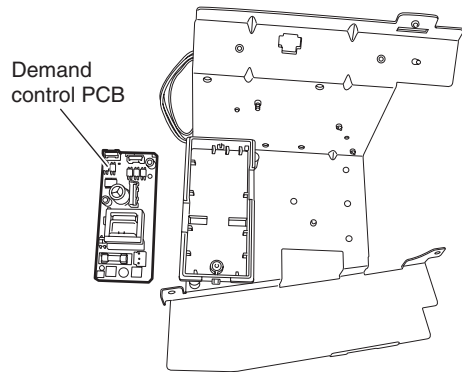
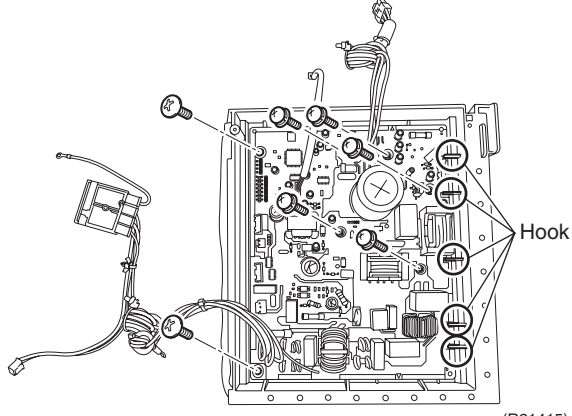
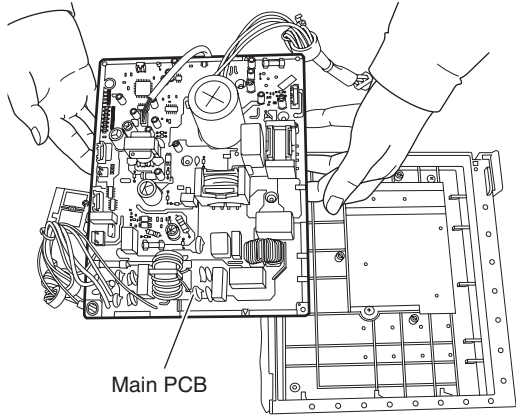


Warning

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Step	Procedure	Points
1	Remove the 2 screws and detach the earth / ground wires.	<p>Earth / ground screw</p>  <p>Earth / ground screw</p> <p>(R21406)</p>
2	Cut the clamp.	<p>Clamp</p>  <p>(R21407)</p> <p>■ The position of the clamp varies depending on the models.</p>
3	Pull out the 3 clamps.	<p>Clamp</p>  <p>Clamp</p> <p>(R21408)</p> <p>■ Some models have only 2 clamps.</p>

Step	Procedure	Points
4	Remove the screw and remove the terminal board.	
	 <p style="text-align: right;">(R21409)</p>	
5	Disconnect the connectors [S201], [S203].	
	 <p style="text-align: right;">(R21410)</p>	<p>[S201]: terminal board [S203]: main PCB</p> <ul style="list-style-type: none"> ■ Some models have no connectors [S201] and [S203].
6	Remove the 2 screws.	
	 <p style="text-align: right;">(R21411)</p>	
7	Unfasten the hook on the back and remove the electronic component mounting plate.	
	 <p style="text-align: right;">(R21412)</p>	

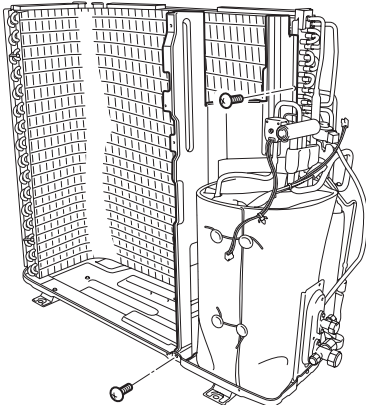
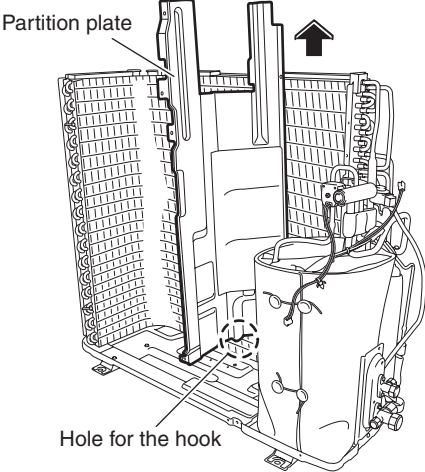
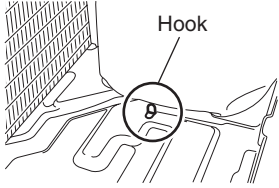
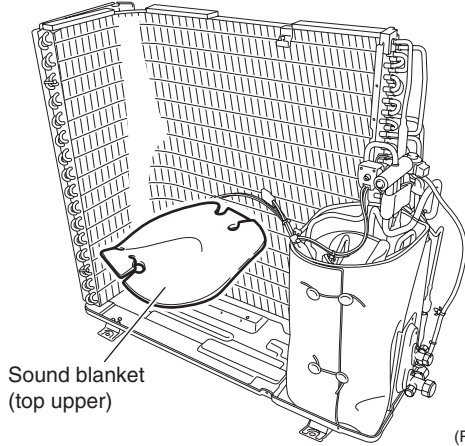
Step	Procedure	Points
8	Disconnect the connector [S206].	
9	Remove the screw.	
10	Unfasten the hook and remove the demand control PCB.	<ul style="list-style-type: none"> ■ The demand controller as an optional accessory has [S204] and [S205] instead of [S206].
	 <p style="text-align: right;">(R21413)</p>  <p style="text-align: right;">(R21414)</p>	<p>[S206] / [S204][S205]: smart meter</p> <ul style="list-style-type: none"> ■ Some models have no demand control PCB.
11	Remove the 7 screws.	
12	Unfasten the 5 hooks and remove the main PCB.	
	 <p style="text-align: right;">(R21415)</p>	
	 <p style="text-align: right;">(R21416)</p>	

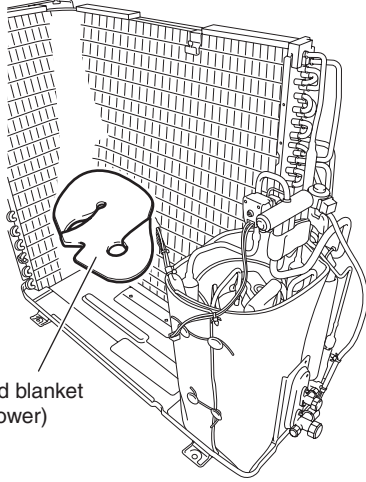
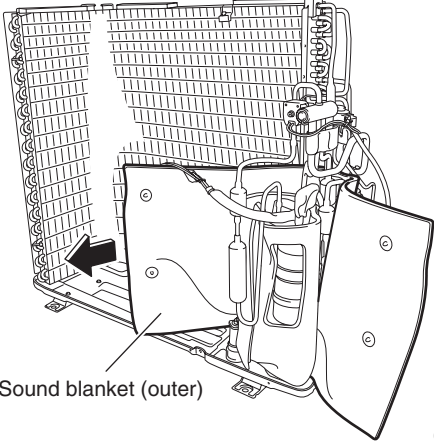
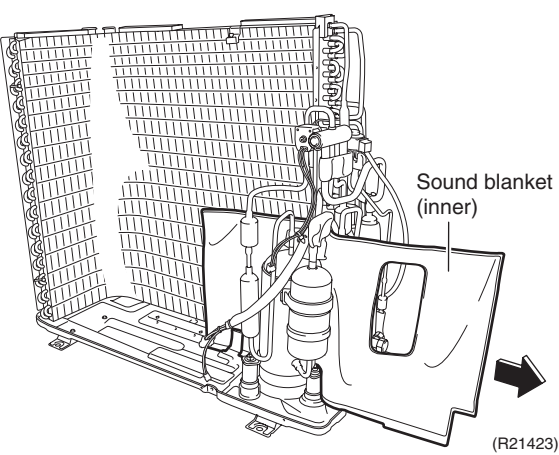
5. Partition Plate / Sound Blankets



Warning

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Step	Procedure	Points
<p>1. Remove the partition plate.</p> <p>1 Remove the 2 screws and remove the partition plate.</p>	 <p>(R21417)</p>  <p>(R21418)</p>	<p>■ When reassembling, make sure to fit the hook on the bottom.</p>  <p>(R21419)</p>
<p>2. Remove the sound blankets.</p> <p>1 Remove the sound blanket (top upper).</p>	 <p>(R21420)</p>	<p>■ Since the piping ports are torn easily, remove the sound blankets carefully.</p>

Step	Procedure	Points
2	Remove the sound blanket (top lower).	
	 <p data-bbox="564 613 703 663">Sound blanket (top lower)</p> <p data-bbox="995 696 1066 712">(R21421)</p>	
3	Remove the sound blanket (outer).	
	 <p data-bbox="564 1151 767 1178">Sound blanket (outer)</p> <p data-bbox="995 1200 1066 1216">(R21422)</p>	
4	Remove the sound blanket (inner).	
	 <p data-bbox="922 1429 1066 1478">Sound blanket (inner)</p> <p data-bbox="995 1693 1066 1709">(R21423)</p>	

6. Electronic Expansion Valve Coil / 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.)



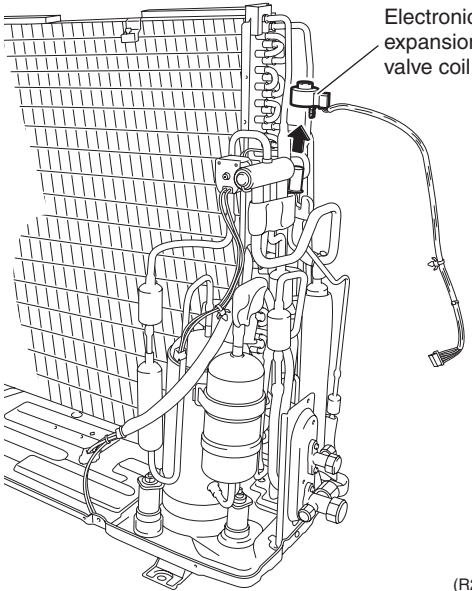
Caution

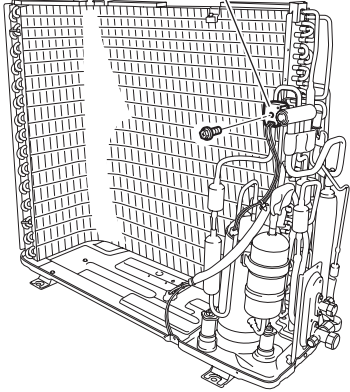
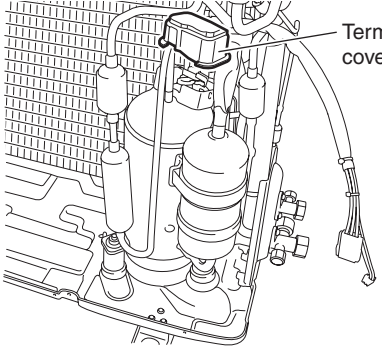
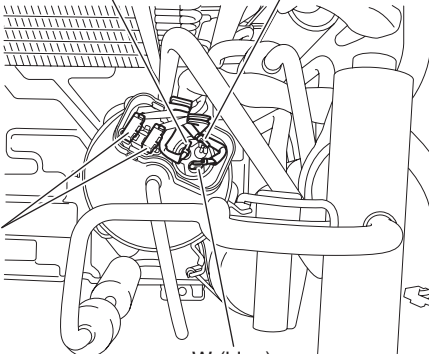
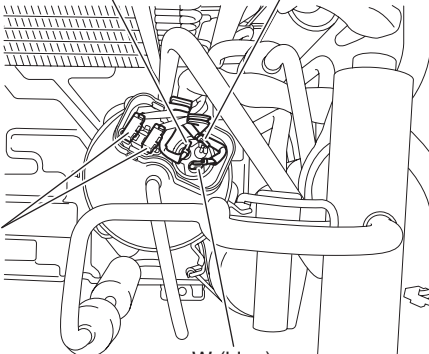
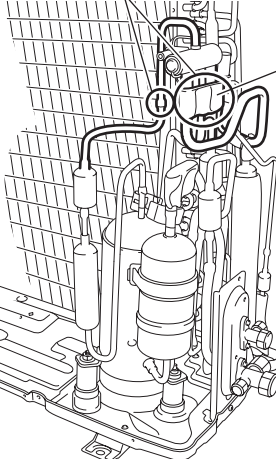
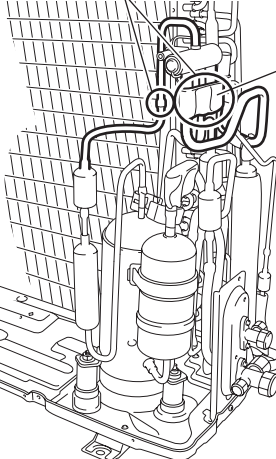
- ◆ From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.
- ◆ **Cautions for restoration**
 1. Restore the piping by non-oxidation brazing.
 2. It is required to prevent the carbonization of the oil inside 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	<p>Pull out the electronic expansion valve coil.</p>  <p style="text-align: right;">(R21424)</p>	<ul style="list-style-type: none"> ■ The cooling only models have no four way valve coil.

Step		Procedure	Points
2	Remove the screw and remove the four way valve coil.	<p style="text-align: center;">Four way valve coil</p>  <p style="text-align: right;">(R21425)</p>	
3	Remove the terminal cover.	 <p style="text-align: right;">(R21426)</p>	
4	Disconnect the harness for overload protector.	<p style="text-align: center;">V (yellow) U (red)</p>  <p style="text-align: right;">(R21427)</p>	
5	Disconnect the compressor lead wires.	<p style="text-align: center;">W (blue)</p>  <p style="text-align: right;">(R21427)</p>	
6	Remove the sheets of putty.	<p style="text-align: center;">Brazed part</p>  <p style="text-align: right;">(R21428)</p>	
7	Heat up the every brazed part and disconnect the four way valve.	<p style="text-align: center;">Putty</p>  <p style="text-align: right;">(R21428)</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.



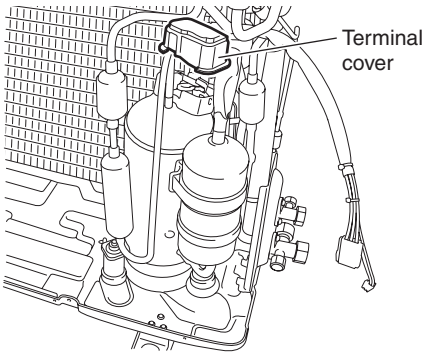
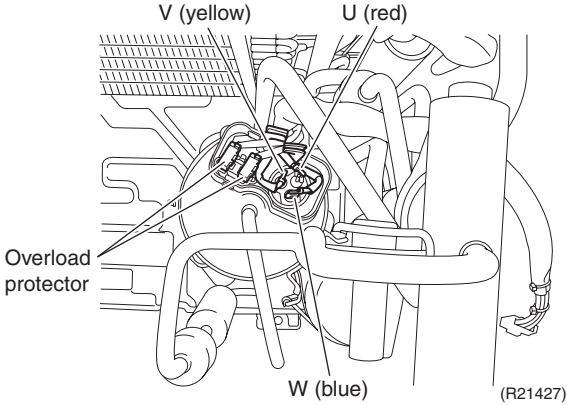
Caution

- ◆ 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.

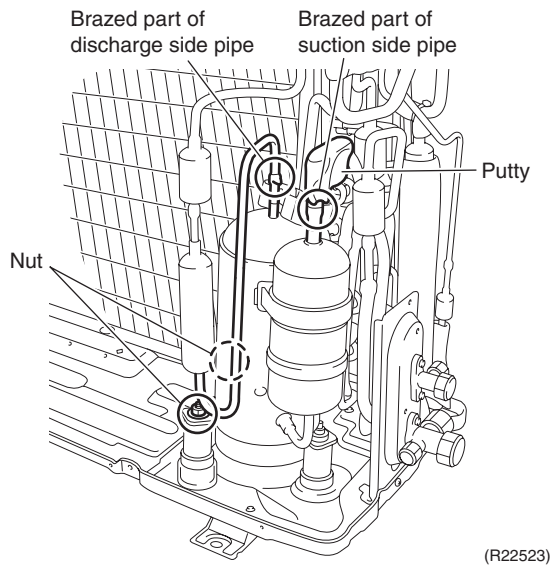


Note

- ◆ 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	Points
1	Remove the terminal cover.	 <p style="text-align: right;">(R21426)</p>
2 3	Disconnect the harness for overload protector. Disconnect the compressor lead wires.	 <p style="text-align: right;">(R21427)</p>

Step	Procedure	Points
4	Remove the sheets of putty.	
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 and remove the compressor.	



Revision History

Month / Year	Version	Revised contents
04 / 2015	Si001421E	First edition
09 / 2015	Si001421EA	Model addition: RXM41/50NVLT, RXV41/50/63NVLT

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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