




Si001416E

# REMOVAL PROCEDURE



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

## 1.5/2.0/2.5/3.5 kW Class 9000/12000 Btu/h Class

-  Outdoor Unit
-  Inverter
-  Pair Type



# **Service Manual Removal Procedure**

## **Outdoor Unit**

### **●Cooling Only**

**RKC09NV2S  
RKC12NV2S**

**RKC15NVM4  
RKC20NVM4  
RKC25NVM4  
RKC35NVM4**

**RKC25NVM  
RKC35NVM**

**RKC25NVMV  
RKC35NVMV**

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

# 1. Outer Panels

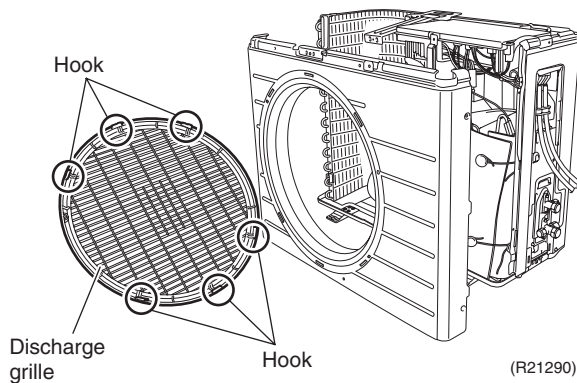
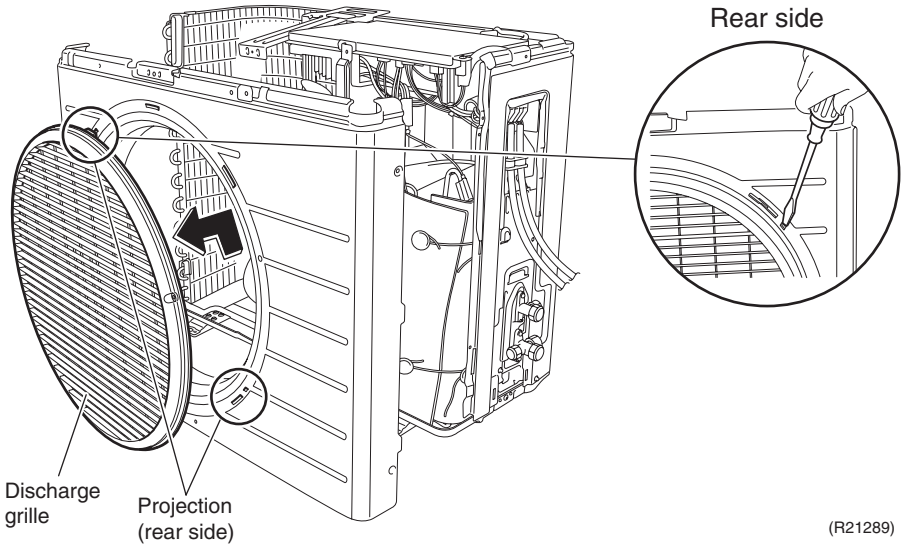
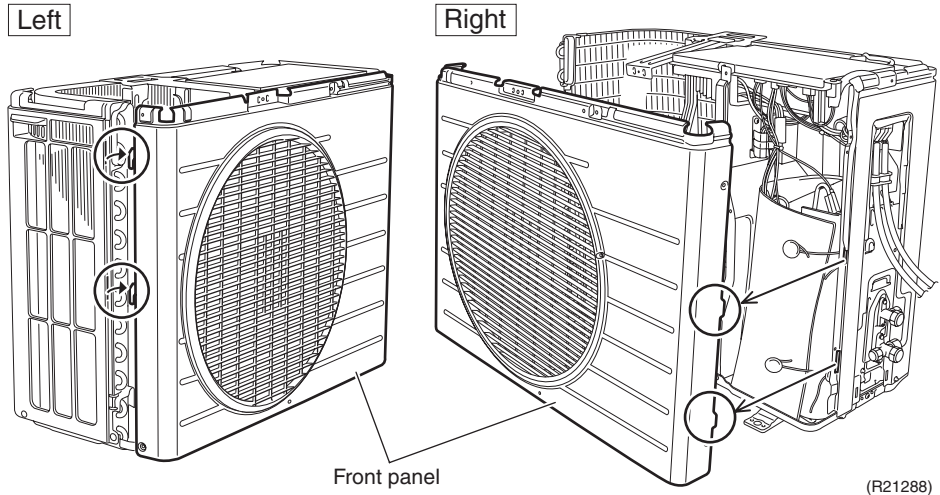


**Warning**

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

Step	Procedure	Points
1	Remove the screw of the stop valve cover.	<ul style="list-style-type: none"> <li>■ The stop valve cover is united with the shield plate.</li> <li>■ When reassembling, make sure to fit the 3 hooks.</li> </ul>
2	Pull down and remove the stop valve cover.	
3	Remove the 3 screws and remove the top panel.	
4	Remove the 6 screws of the front panel.	
<p>Stop valve cover (R21285)</p> <p>Shield plate (R21286)</p> <p>Hook</p> <p>Top panel</p> <p>Front panel (R21287)</p>		

Step	Procedure	Points
5	Lift up the left side and unfasten the 2 hooks.	
6	Unfasten the 2 right side hooks and remove the front panel.	
7	Press the 2 projections from the rear side and rotate the discharge grille.	
8	Unfasten the 6 hooks and remove the discharge grille.	



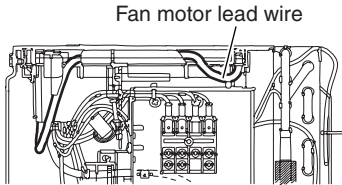
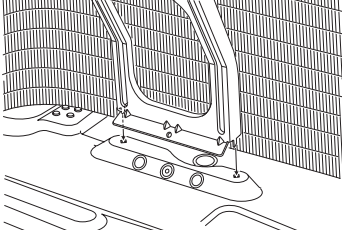
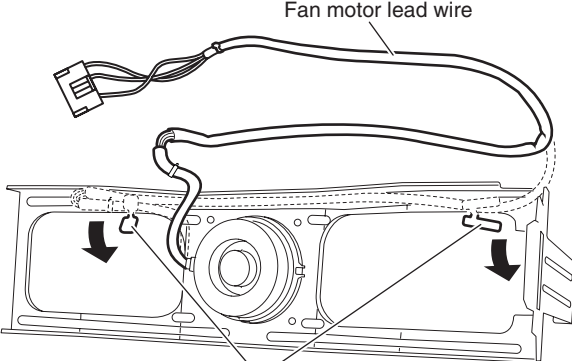
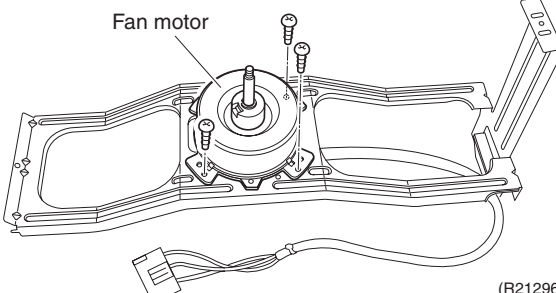
## 2. Outdoor Fan / Fan Motor



**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 nut and remove the outdoor fan.		<p>■ Nut size: M6</p> <p>■ When reassembling, align the ▼ mark of the outdoor fan with the D-cut section of the motor shaft.</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>
2	Disconnect the connector [S70].		<p>[S70]: fan motor</p> <p>■ When reassembling, do not fix the fan motor lead wire inside the hook of the electrical box.</p>

Step	Procedure	Points
3	Release the fan motor lead wire from the 2 grooves and the 2 hooks.	<p>■ When reassembling, pass the fan motor lead wire as shown below.</p>  <p>Fan motor lead wire</p> <p>(R21320)</p>
4	Remove the screw and remove the fan motor fixing frame.	<p>■ When reassembling, fit the 2 lower hooks into the bottom frame.</p>  <p>(R10460)</p>
5	Unfasten the 2 hooks on the motor fixing frame and release the fan motor lead wire.	 <p>Fan motor lead wire</p> <p>Hook</p> <p>(R21295)</p>
6	Remove the 3 screws and remove the fan motor.	<p>■ Screw size: M4 × 16</p>  <p>Fan motor</p> <p>(R21296)</p>



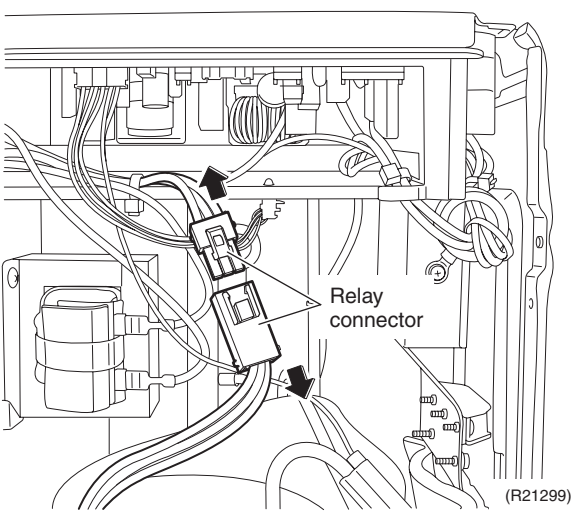
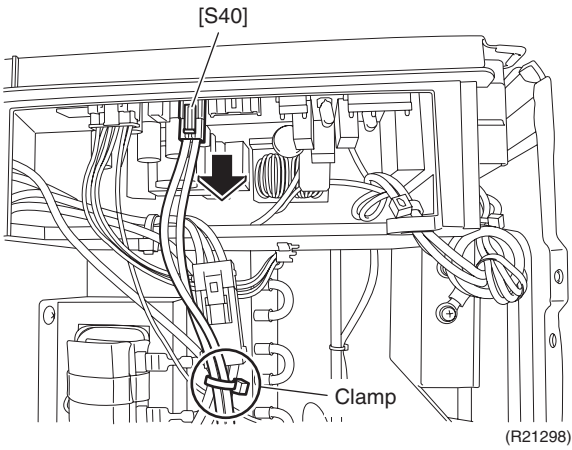
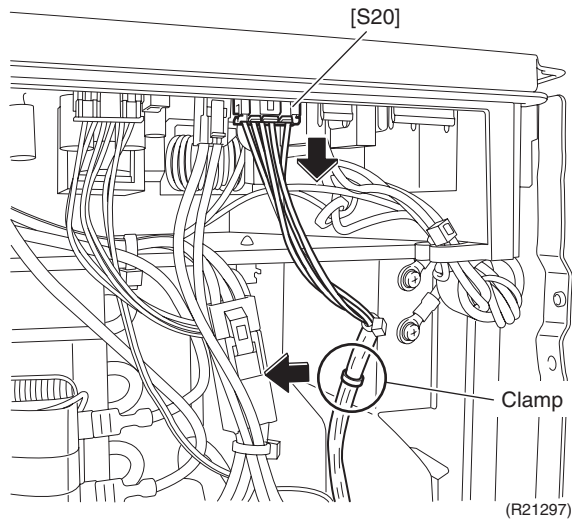
### 3. Electrical box



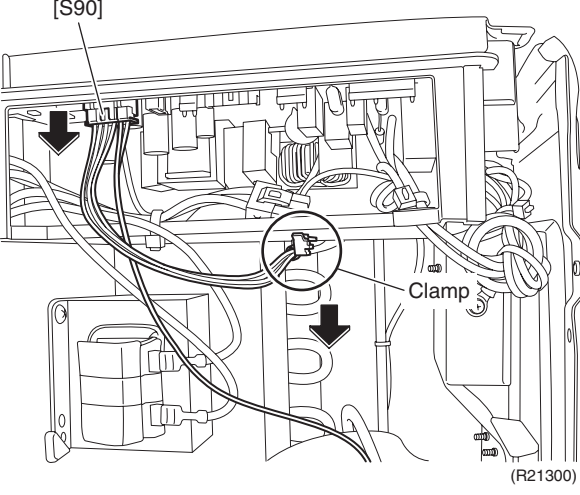
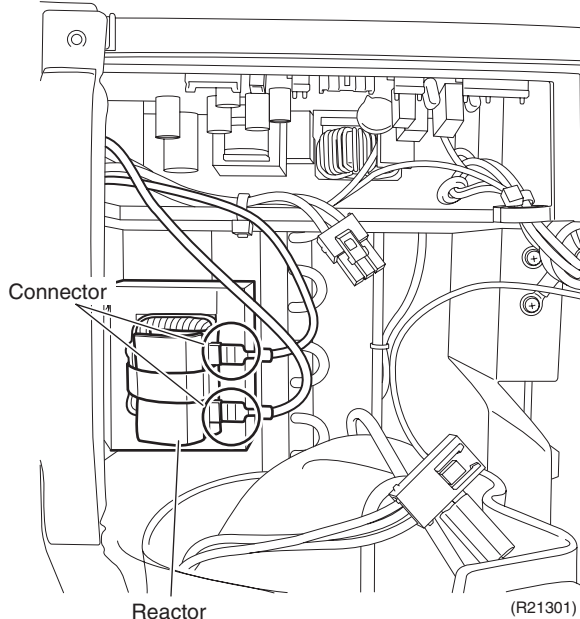
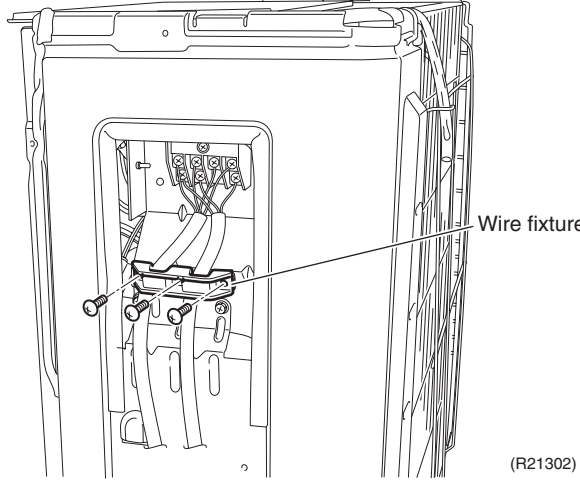
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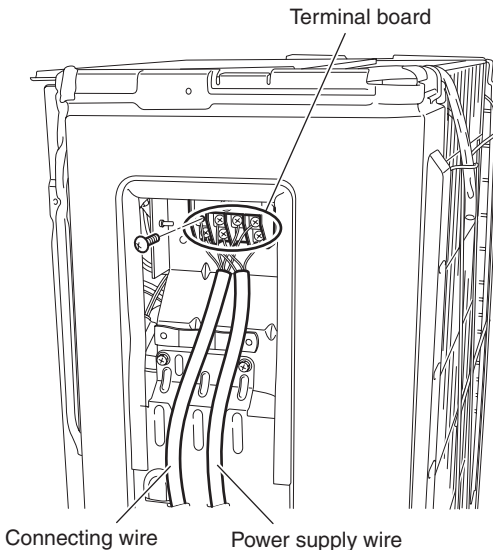
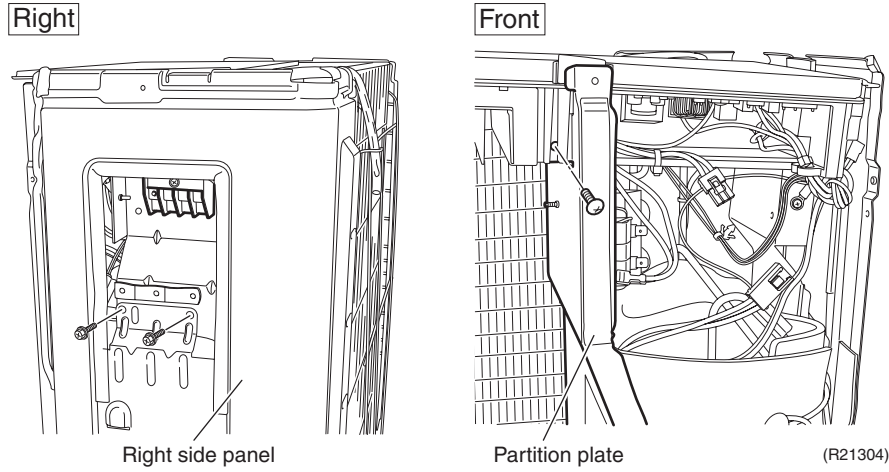
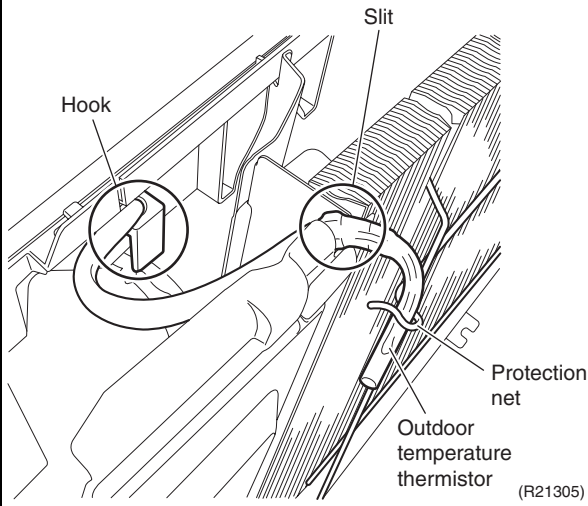
◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1	Disconnect the connector [S20] and pull out the clamp.	[S20]: electronic expansion valve coil
2	Cut the clamp and disconnect the connector [S40].	[S40]: overload protector
3	Disconnect the relay connector for compressor.	

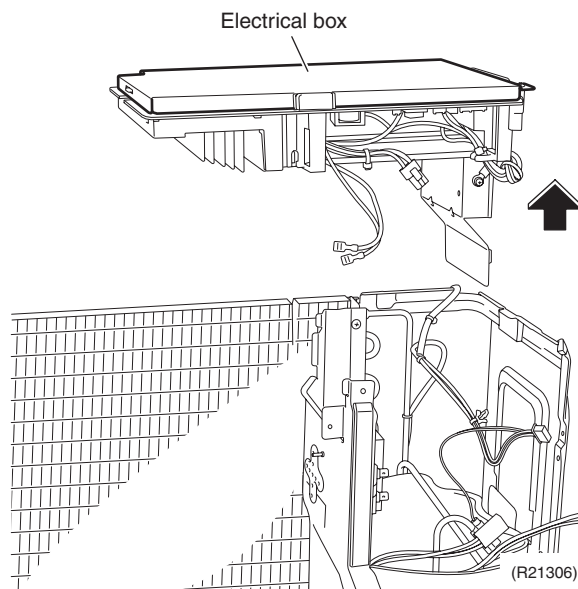
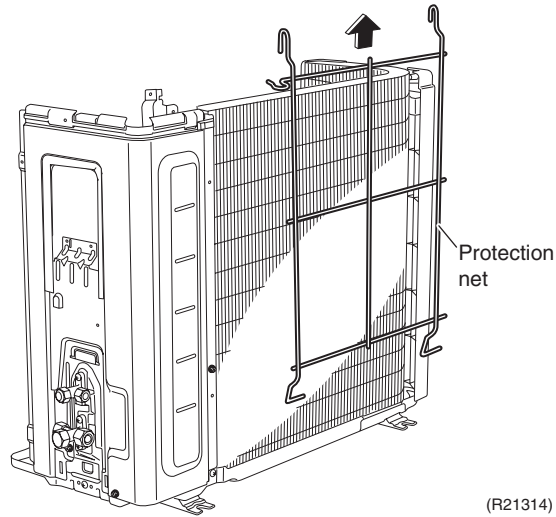




Step	Procedure	Points
4	<p>Disconnect the connector [S90] and pull out the clamp.</p>  <p>(R21300)</p>	<p>[S90]: thermistors</p>
5	<p>Disconnect the 2 connectors from the reactor.</p>  <p>(R21301)</p>	<p>■ When reassembling, you can reconnect the 2 connectors for the reactor in either way regardless of the color.</p>
6	<p>Remove the 3 screws and remove the wire fixture.</p>  <p>(R21302)</p>	

Step	Procedure	Points
7	<p>Remove the 7 screws on the terminal board and disconnect the connecting wire and power supply wire.</p> 	
8	<p>Remove the 2 screws on the right side panel, then remove the screw on the partition plate.</p> 	
9	<p>Remove the outdoor temperature thermistor from the protection net, the hook, and the slit.</p> 	

Step	Procedure	Points
10	Lift up the protection net and remove it.	
11	Lift up the electrical box and remove it.	

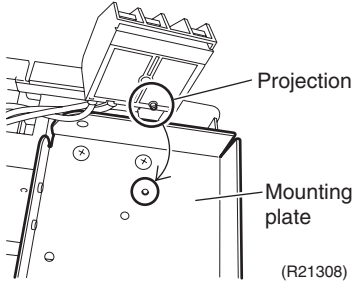


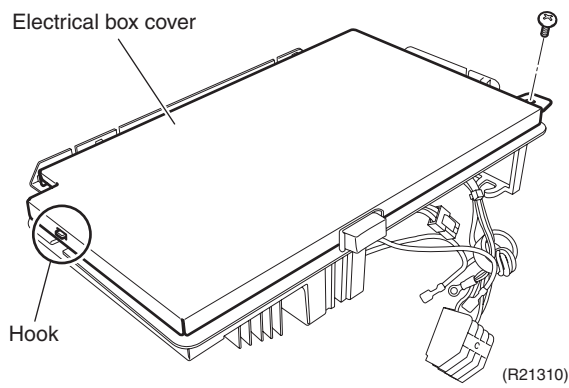
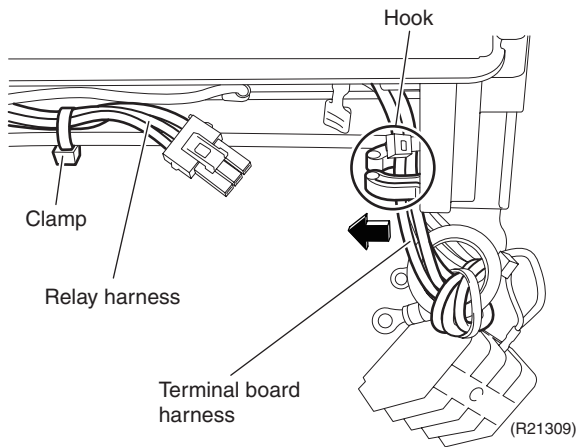
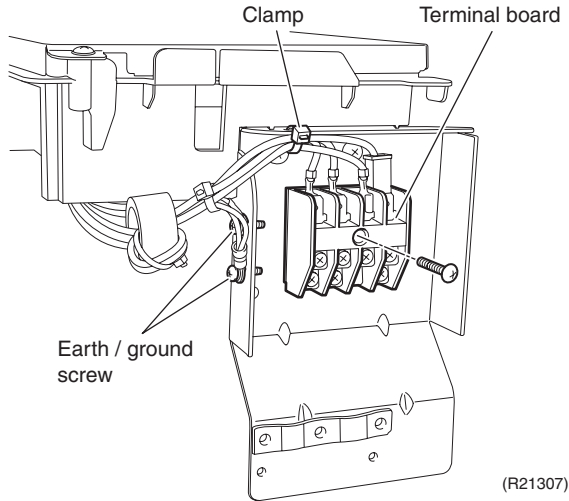
# 4. PCB

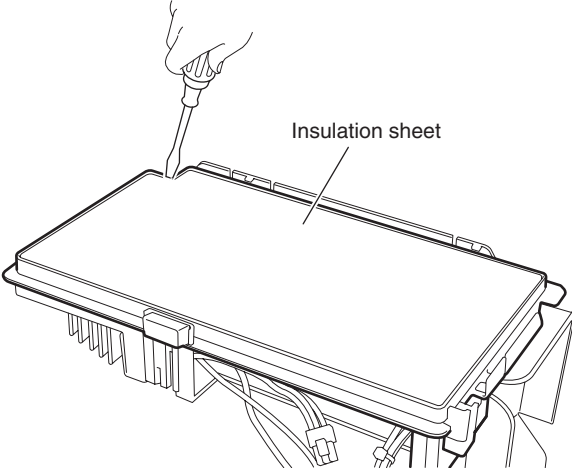
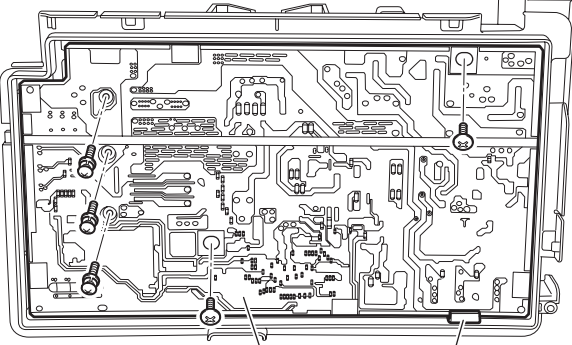
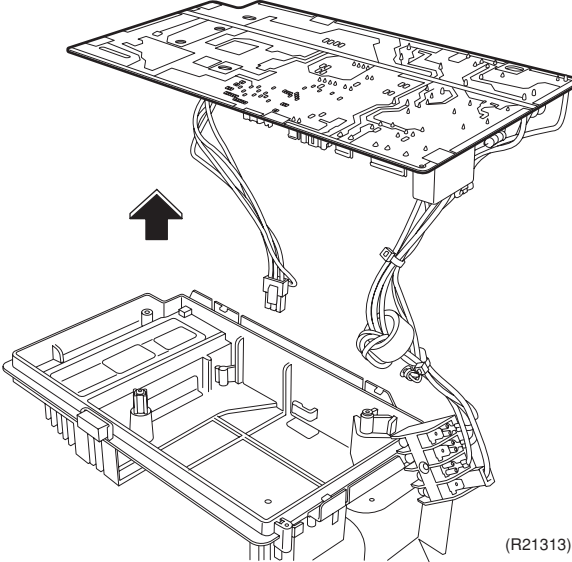


**Warning**

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

Step	Procedure	Points
1	Cut the clamp and remove the screw from the terminal board.	<p>■ When reassembling, fit the projection at the back of the terminal board into the hole on the mounting plate.</p> 
2	Remove the 2 earth / ground screws.	
3	Release the terminal board harnesses from the hook inside the electrical box.	
4	Cut the clamp to release the relay harness for the compressor.	
5	Remove the screw and unfasten the hook on the left side to remove the electrical box cover.	



Step	Procedure	Points
6	Remove the insulation sheet.  <p style="text-align: right;">(R21311)</p>	<ul style="list-style-type: none"> <li>■ The insulation sheet can be easily removed by using a flat-head screwdriver.</li> </ul>
7	Remove the 5 screws of the PCB.  <p style="text-align: center;">PCB                      Hook      (R21312)</p>	
8	Unfasten the hook and remove the PCB.  <p style="text-align: right;">(R21313)</p>	

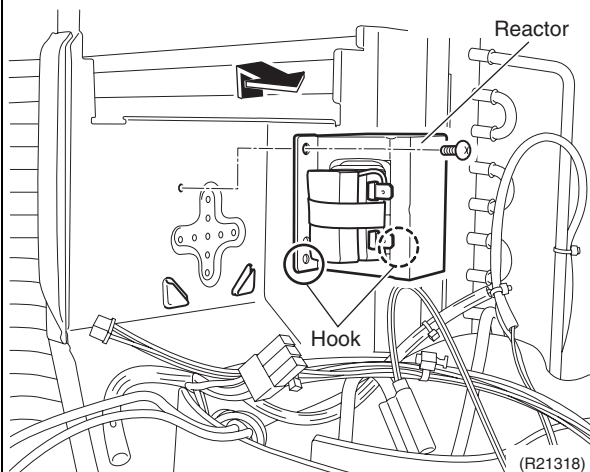
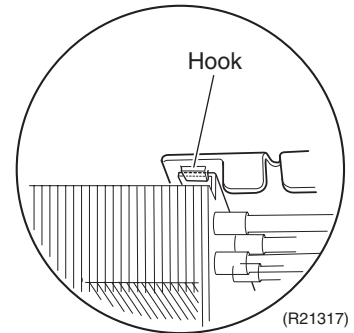
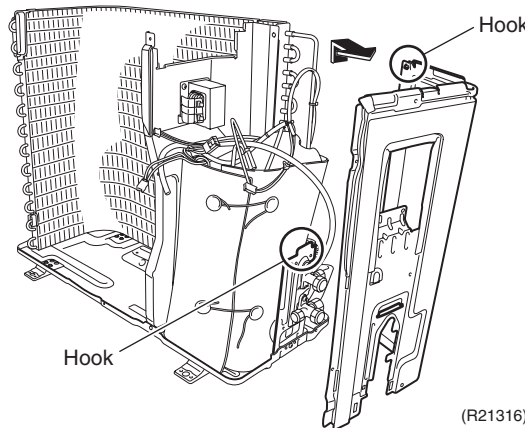
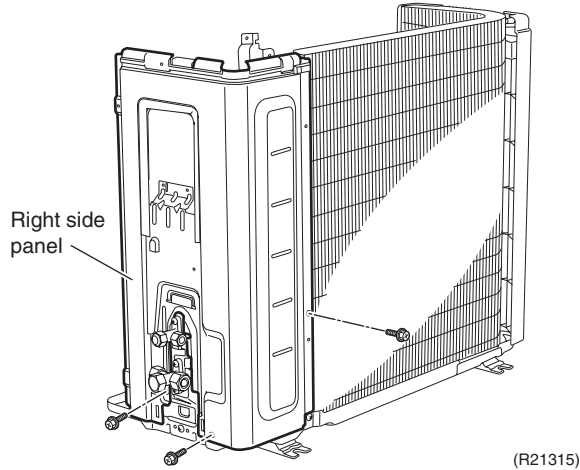
# 5. Reactor / Partition Plate



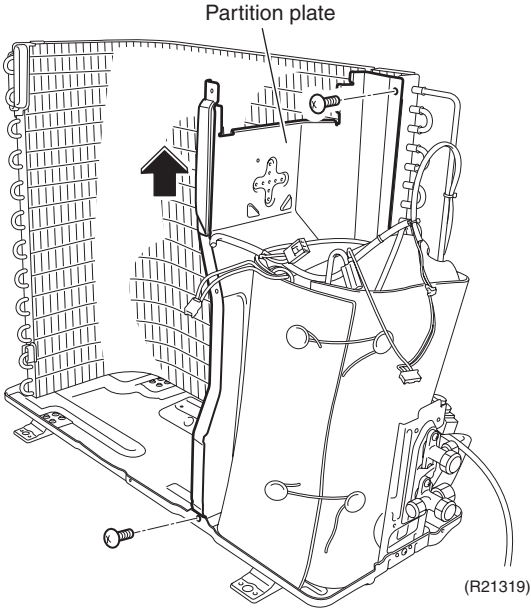
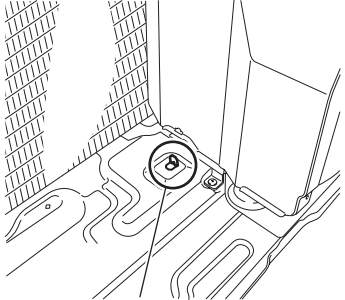
**Warning**

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

Step	Procedure	Points
1	Remove the 3 screws of the right side panel.	
2	Unfasten the 2 hooks and remove the right side panel.	<p>■ When reassembling, make sure to fit the rear hook.</p>
3	Remove the screw of the reactor.	
4	Slide the reactor upward to unfasten the 2 hooks.	
5	Remove the reactor.	





Step	Procedure	Points
6	<p data-bbox="199 219 448 309">Remove the 2 screws and remove the partition plate.</p>  <p data-bbox="995 801 1066 824">(R21319)</p>	<p data-bbox="1093 219 1437 277">■ When reassembling, fit the hook on the bottom frame.</p>  <p data-bbox="1219 607 1445 636">Hook (R21363)</p>

# 6. Thermistor ASSY



**Warning**

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

Step	Procedure	Points
<p>1 Pull out the discharge pipe temperature thermistor.</p> <p>2 Cut the clamp.</p> <p>3 Pull out the outdoor heat exchanger thermistor and remove the thermistor ASSY.</p>	<p>(R21321)</p> <p>Thermistor ASSY</p> <p>(R21322)</p>	<p>■ Be careful not to lose the fixture for the thermistor.</p> <p>Fixture</p> <p>(R20430)</p> <p>■ Be careful not to lose the clip for the thermistor.</p> <p>Clip</p> <p>(R20852)</p>

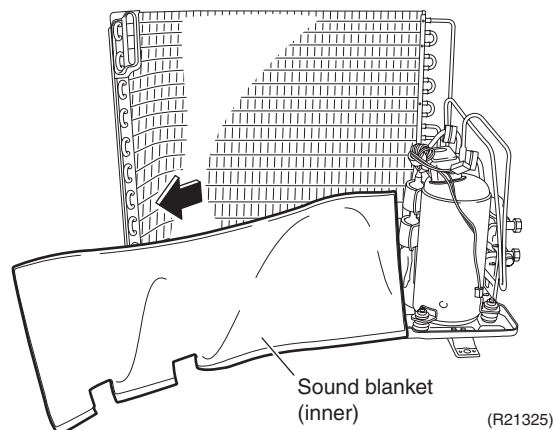
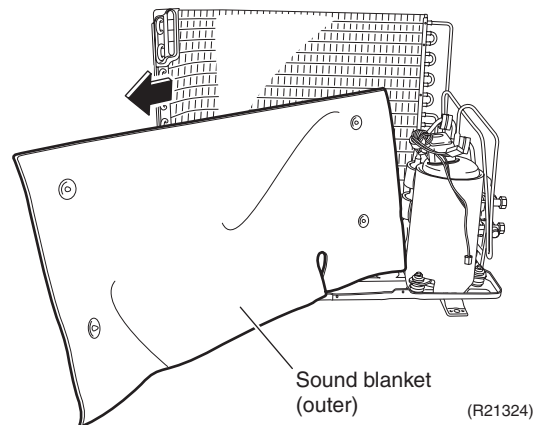
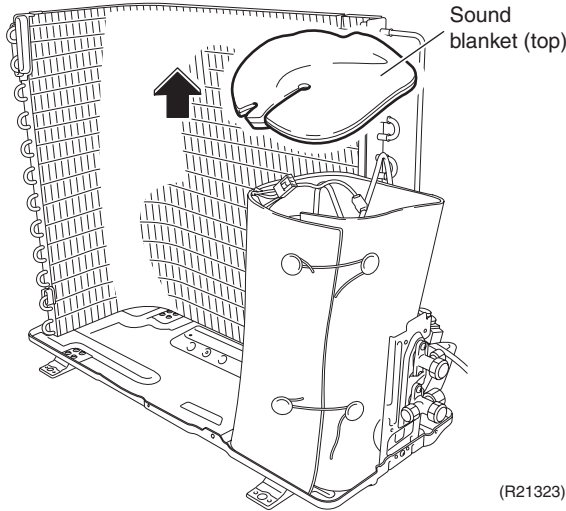
## 7. Sound Blankets



### 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"> <li>■ Since the piping ports on the sound blanket are torn easily, remove the blanket carefully.</li> </ul>
2	Untie the 2 strings and pull out the sound blanket (outer).	
3	Pull out the sound blanket (inner).	



# 8. Electronic Expansion Valve Coil / 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.



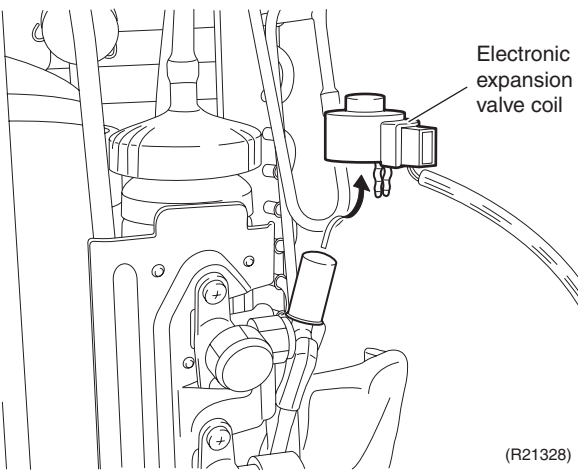
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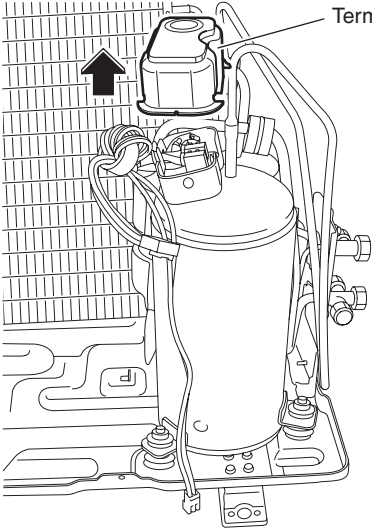
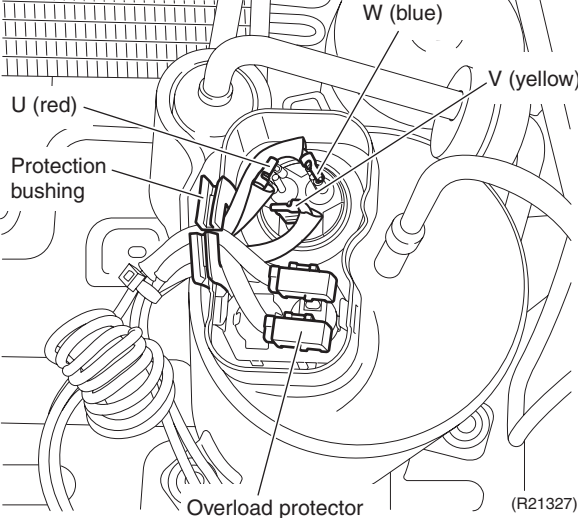

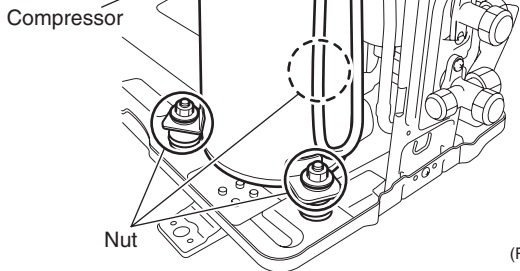
- ◆ From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.
- ◆ Restore the piping by non-oxidation brazing.



**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	Pull out the electronic expansion valve coil.	 <p style="text-align: right;">(R21328)</p>	

Step	Procedure	Procedure	Points
2	Remove the terminal cover.	 <p>Terminal cover</p> <p>(R21326)</p>	
3	Remove the protection bushing.	 <p>W (blue)</p> <p>V (yellow)</p> <p>U (red)</p> <p>Protection bushing</p> <p>Overload protector</p> <p>(R21327)</p>	
4	Disconnect the compressor lead wires.		
5	Disconnect the overload protector.		
6	Heat up the brazed part of the discharge side pipe and disconnect it.	 <p>Brazed part of the discharge side pipe</p> <p>Brazed part of the suction side pipe</p>	
7	Heat up the brazed part of the suction side pipe and disconnect it.		
8	Remove the 3 nuts.		
9	Lift up the compressor and remove it.	 <p>Compressor</p> <p>Nut</p> <p>(R21329)</p>	

# Revision History

Month / Year	Version	Revised contents
03 / 2015	Si001416E	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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