


# REMOVAL PROCEDURE



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

### 2.5/3.5/4.2 kW Class

-  Outdoor Unit
-  Inverter
-  Pair Type



# **Service Manual Removal Procedure**

## **Outdoor Unit**

### **●Cooling Only**

**RKS25EBVMV  
RKS35EBVMV**

**RKS25GVM4  
RKS35GVM4**

**RKS25GVMV  
RKS35GVMV**

**RKS25JVMG  
RKS35JVMG**

**RKD25GVMV  
RKD35GVMV  
RKD42GVMV**

**RKD25HVMV  
RKD35HVMV  
RKD42HVMV**

### **●Heat Pump**

**RXS25EBVMV  
RXS35EBVMV**

**RXS25GVMV  
RXS35GVMV**

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**Note:**

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

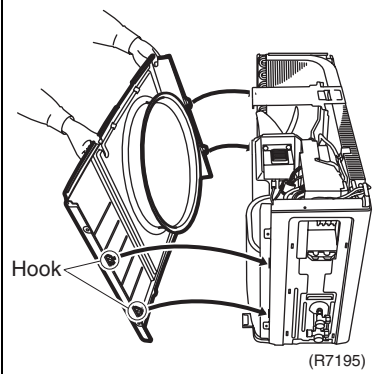
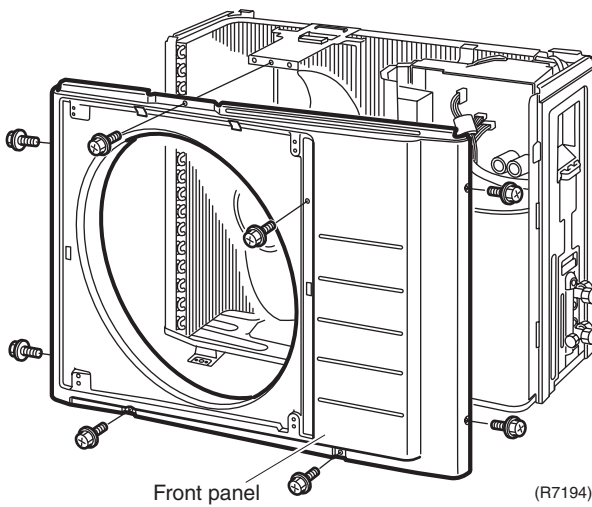
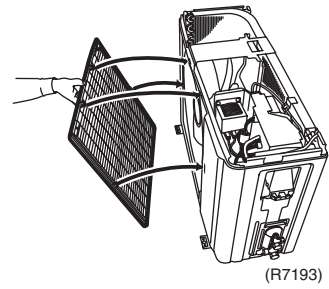
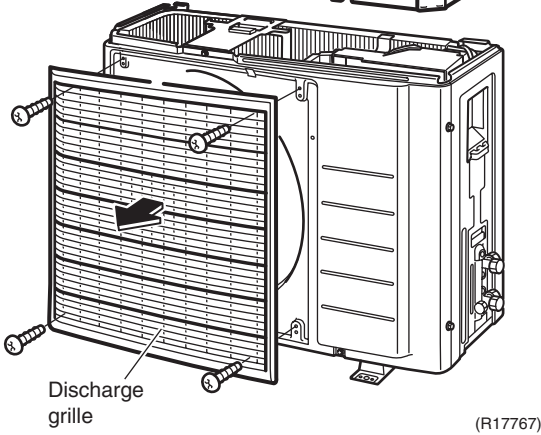
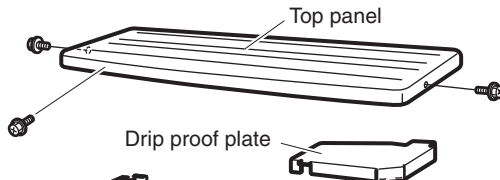
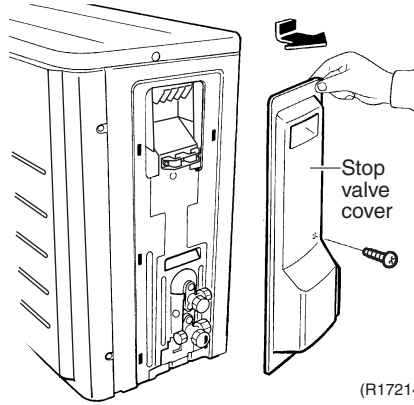
# 1. Outer Panels

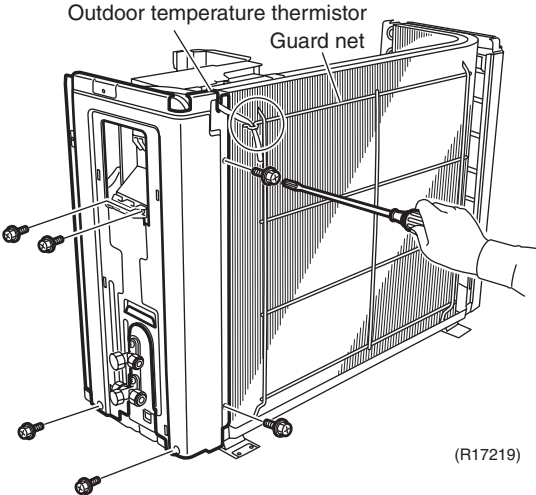
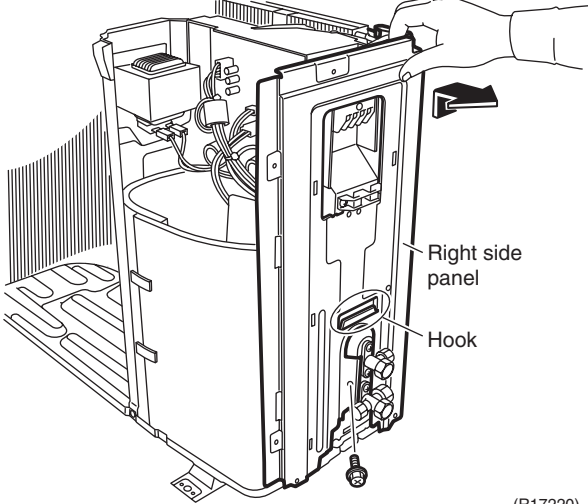
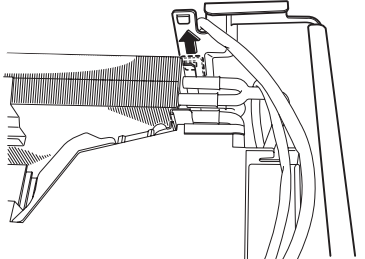


**Warning**

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

Step	Procedure	Points
1	Remove the screw of the stop valve cover.	■ The stop valve cover is united with the shield plate.
2	Pull down the stop valve cover and remove it.	■ When reassembling, make sure to fit the 5 hooks.
3	Remove the 3 screws and lift the top panel.	■ The discharge grille has 4 hooks.
4	Remove the drip proof plate.	
5	Remove the 4 screws and remove the discharge grille.	
6	Remove the 8 screws and remove the front panel.	■ The front panel has 4 hooks.



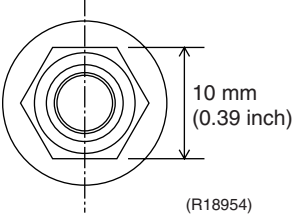
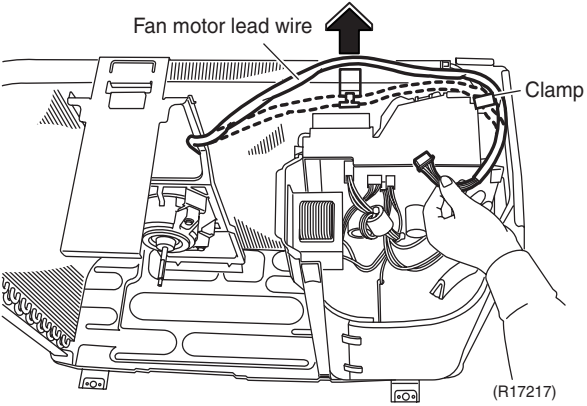
Step	Procedure	Points
7	Remove the 6 screws on the right side and the rear side.	<ul style="list-style-type: none"> <li>■ Take care not to cut your finger by the fins of the outdoor heat exchanger.</li> </ul>
8	Release the outdoor temperature thermistor.	
9	Lift up the guard net and remove it.	
10	Remove the screw of the right side panel.	<ul style="list-style-type: none"> <li>■ When reassembling, make sure to fit the hooks on the right and rear side.</li> </ul>
11	Lift up the right side panel and remove it.	
	 <p>(R17219)</p>  <p>(R17220)</p>	 <p>(R7212)</p>

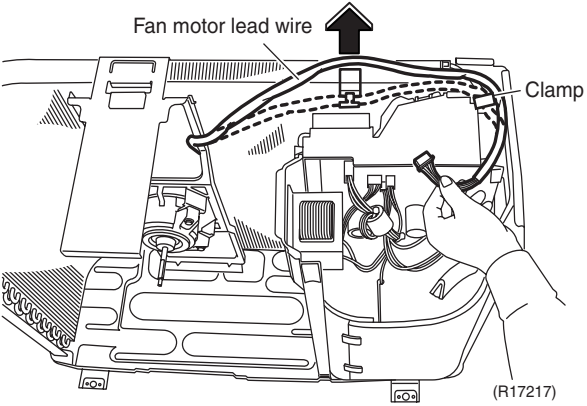
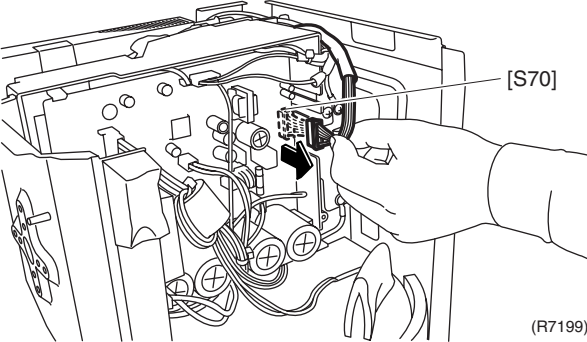
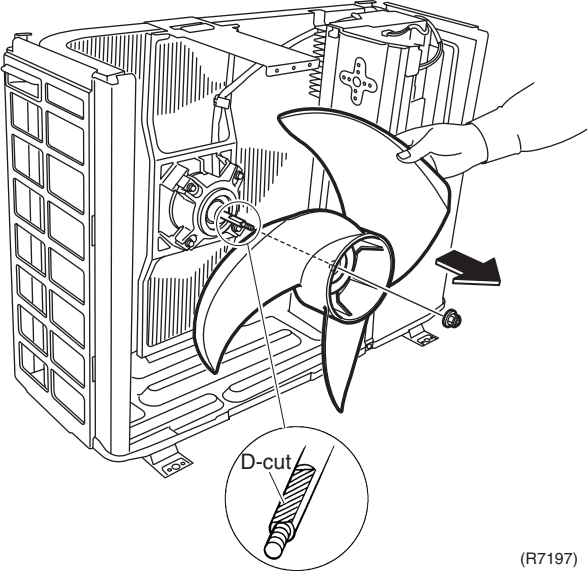
## 2. Fan Motor

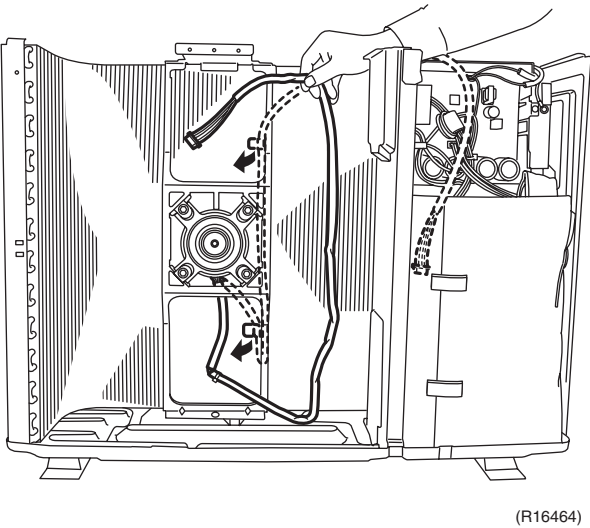
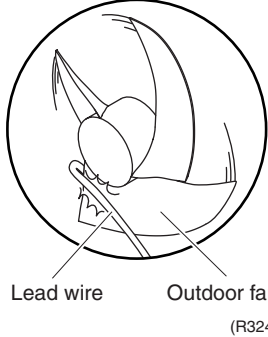
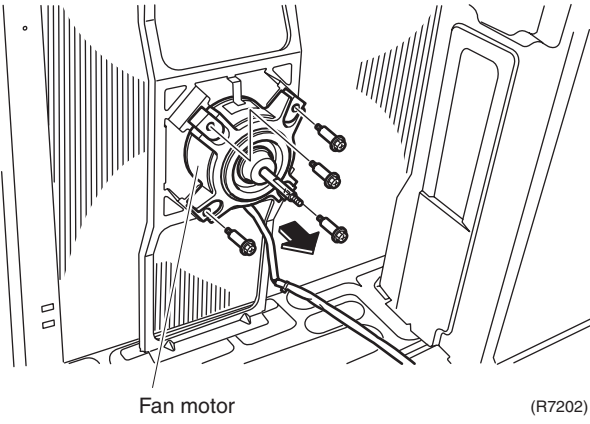
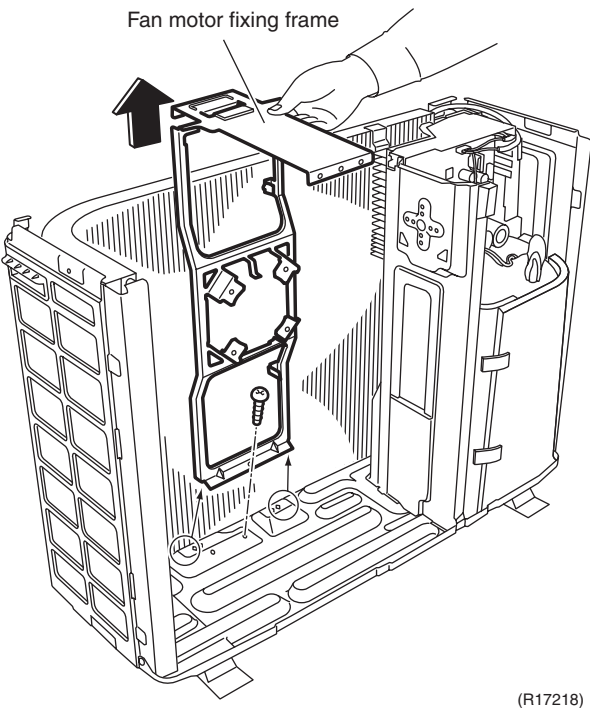


**Warning**

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

Step	Procedure	Points
1	Remove the nut of the outdoor fan.	<p>■ Nut size: M6</p>  <p>(R18954)</p>
2	Remove the outdoor fan.	<p>■ When reassembling, align the ▼ mark of the outdoor fan with the D-cut section of the motor shaft.</p>
3	Disconnect the connector [S70].	<p>[S70]: fan motor</p>
4	Cut the clamp and release the fan motor lead wire from the hook.	 <p>(R17217)</p>



Step	Procedure	Points
5	Open the 2 hooks and release the fan motor lead wire.	<ul style="list-style-type: none"> <li>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).</li> </ul>
		
6	Remove the 4 screws and remove the fan motor.	<ul style="list-style-type: none"> <li>Be sure to remove the lower screws first. If the top screws are removed first, the fan motor may tilt down or fall and cause injury because its center of gravity is shifted to the front.</li> </ul>
		
7	Remove the screw and remove the fan motor fixing frame.	<ul style="list-style-type: none"> <li>When reassembling, fit the lower hooks into the bottom frame.</li> </ul>
		

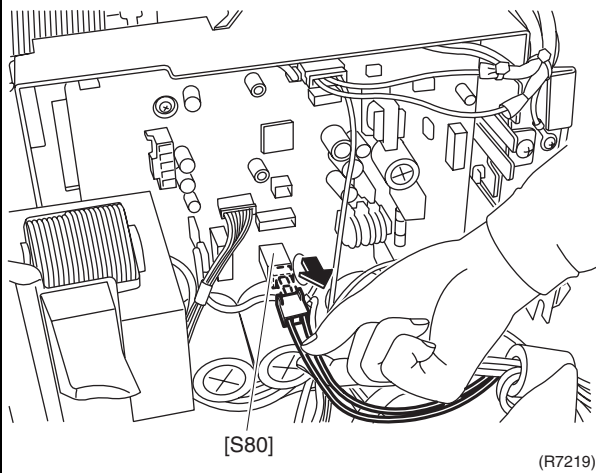
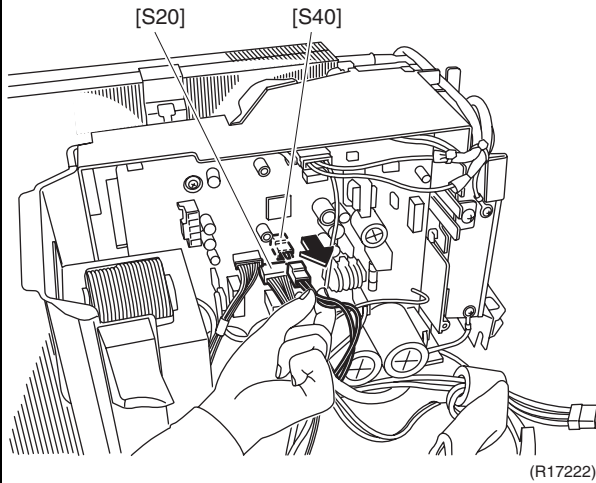
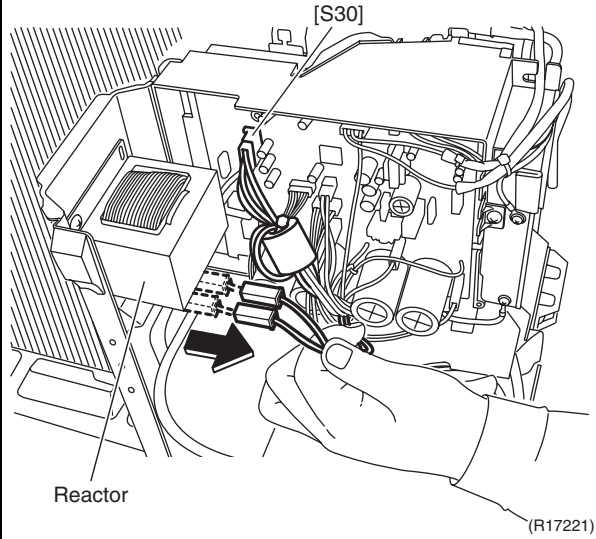
### 3. Electrical Box



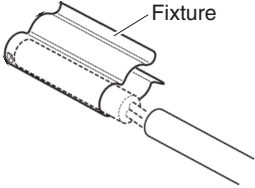
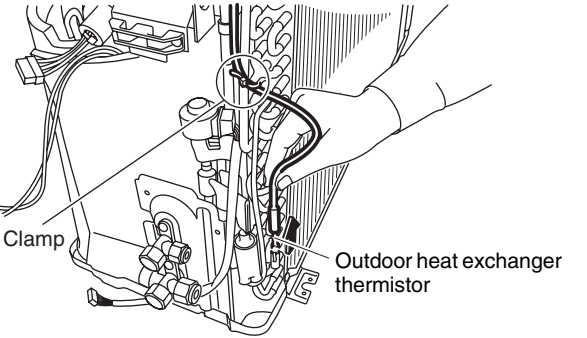
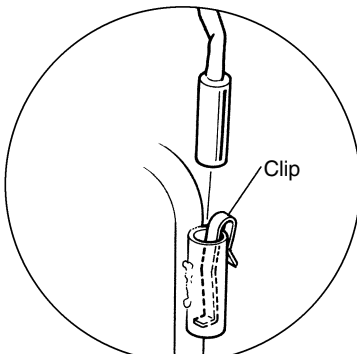
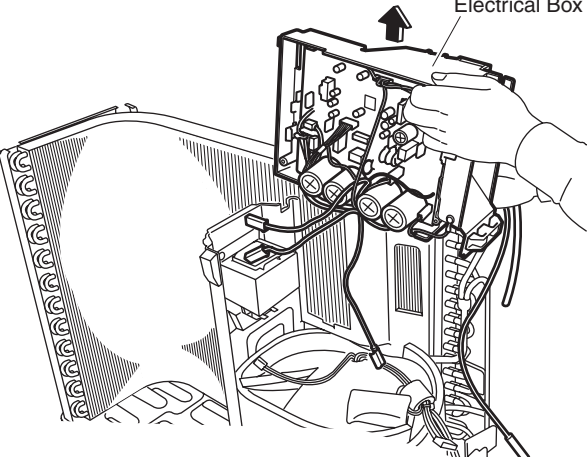
**Warning**

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

Step	Procedure	Points
1	Disconnect the 2 connectors for the reactor.	
2	Disconnect the connector [S30].	[S30]: compressor
3	Disconnect the connector [S40].	[S40]: overload protector
4	Disconnect the connector [S20].	[S20]: electronic expansion valve coil
5	Disconnect the connector [S80].	[S80]: four way valve coil
		<ul style="list-style-type: none"> <li>■ The cooling only models have no harness for [S80].</li> <li>■ When reassembling, connect the connectors in the following order.                             <ol style="list-style-type: none"> <li>(1) [S80]</li> <li>(2) [S20]</li> <li>(3) [S40]</li> <li>(4) [S30]</li> <li>(5) reactor</li> </ol> </li> <li>■ When reassembling, set the harnesses of the four way valve coil and electronic expansion valve coil in front of the compressor lead wire.</li> </ul>





Step	Procedure	Points
6	Release the discharge pipe thermistor.	<ul style="list-style-type: none"> <li>■ Be careful not to lose the fixture for the thermistor.</li> </ul> 
7	Cut the clamp.	<ul style="list-style-type: none"> <li>■ Be careful not to lose the clip for the thermistor.</li> </ul>
8	Pull out the outdoor heat exchanger thermistor.	 
9	Lift and remove the electrical box.	

# 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	Remove the 2 screws and detach the earth / ground wires.	<p>■ You can remove the main PCB when you disconnect the lead wires on the terminal board without removing the electrical box.</p>
2	Remove the 4 screws on the main PCB.	
3	Unfasten the 3 hooks on the upper side.	
4	Lift and pull out the main PCB.	
<p style="text-align: right;">(R19539)</p>		
<p style="text-align: right;">(R16485)</p>		

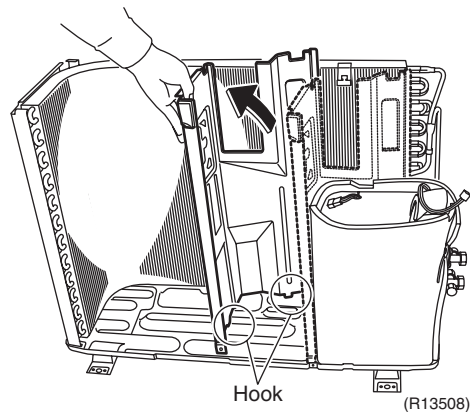
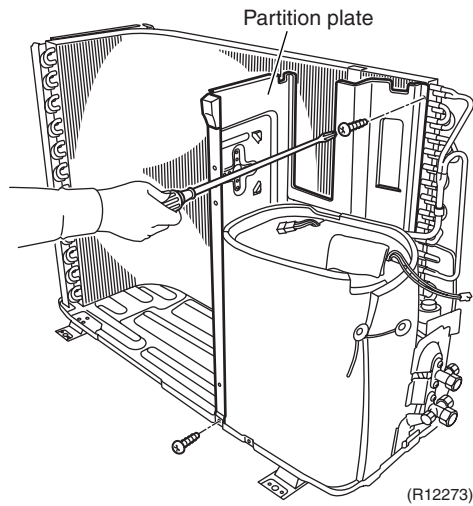
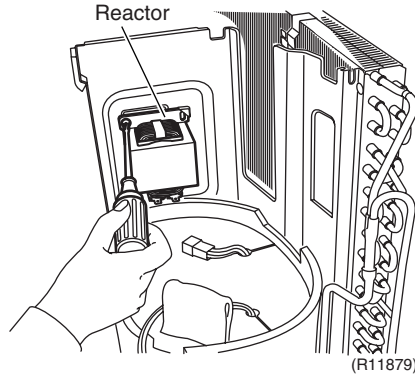
## 5. Reactor / Partition Plate



### 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 screw and remove the reactor.	
2	Remove the 2 screws.	
3	Remove the partition plate.	<ul style="list-style-type: none"> <li>■ The partition plate has 2 hooks on the lower side. When reassembling, fit the lower hooks into the bottom frame.</li> </ul>



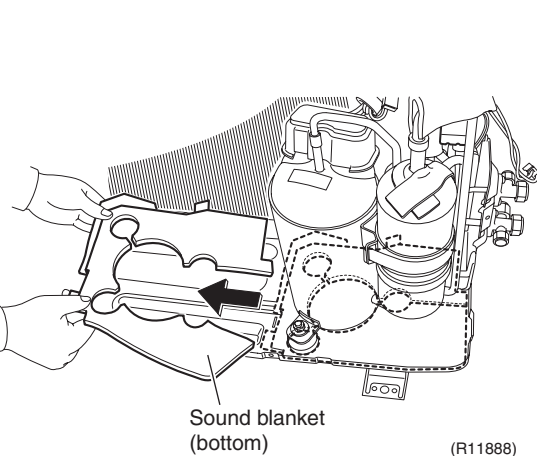
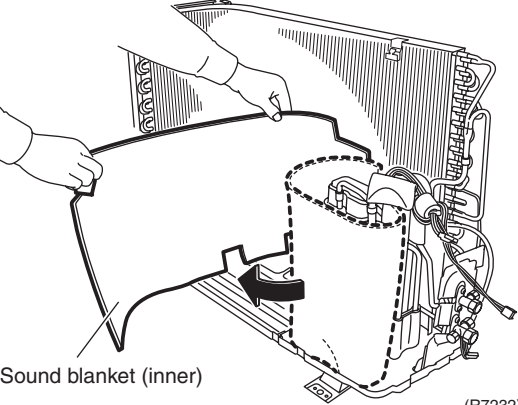
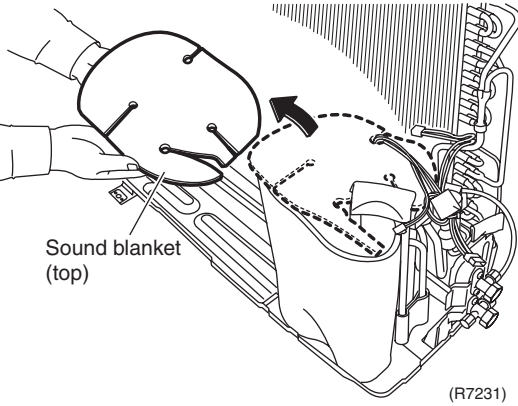
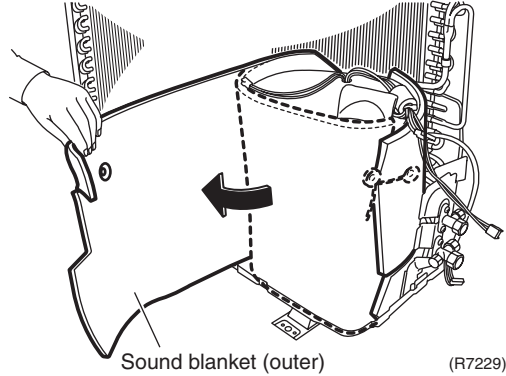
# 6. Sound Blankets



**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 (outer).	<ul style="list-style-type: none"> <li>■ The design of sound blankets varies depending on the model.</li> <li>■ Since the piping ports are torn easily, remove the sound blanket carefully.</li> </ul>
2	Remove the sound blanket (top).	
3	Open and pull out the sound blanket (inner).	
4	Pull out the sound blanket (bottom).	<ul style="list-style-type: none"> <li>■ Some models have no sound blanket (bottom).</li> </ul>



## 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

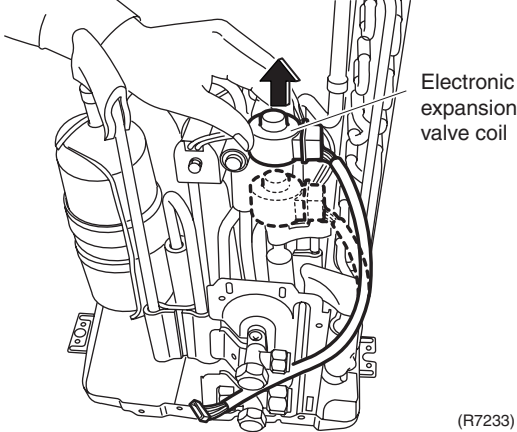
- ◆ From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.
- ◆ Cautions for restoration
  1. Restore the piping by non-oxidation brazing.
  2. It is required to prevent the carbonization of the oil inside 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.

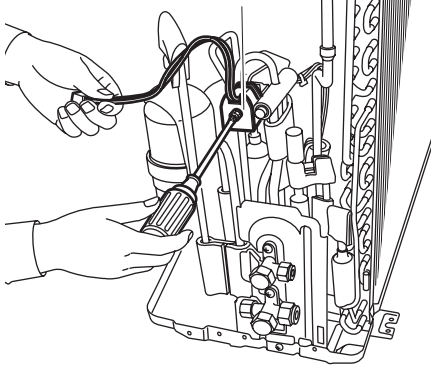
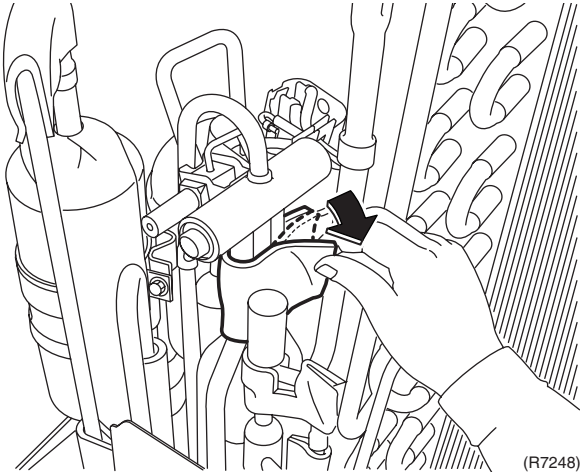
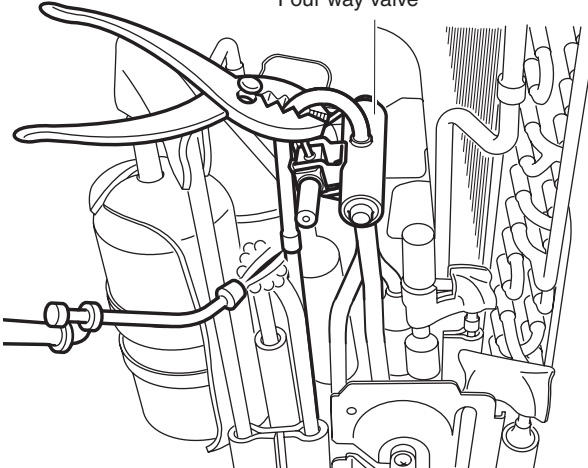
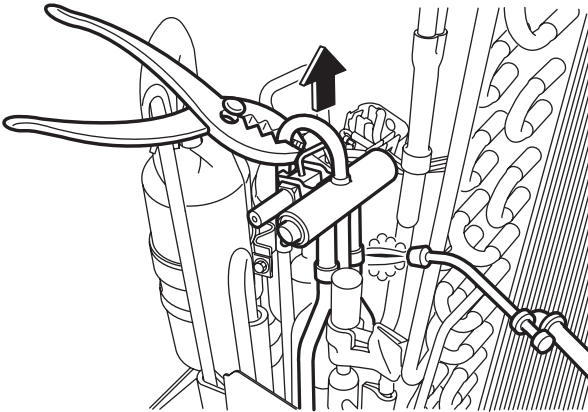


### Note

- ◆ 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	Pull out the electronic expansion valve coil.	<ul style="list-style-type: none"> <li>■ The cooling only models have no four way valve.</li> </ul>



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;">(R7247)</p>	
3	Remove the sheets of putty.	
	 <p style="text-align: right;">(R7248)</p>	
4	Heat up the brazed parts and withdraw the piping with pliers.	
	<p style="text-align: center;">Four way valve</p>  <p style="text-align: right;">(R7249)</p>	
	 <p style="text-align: right;">(R7250)</p>	

## 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.



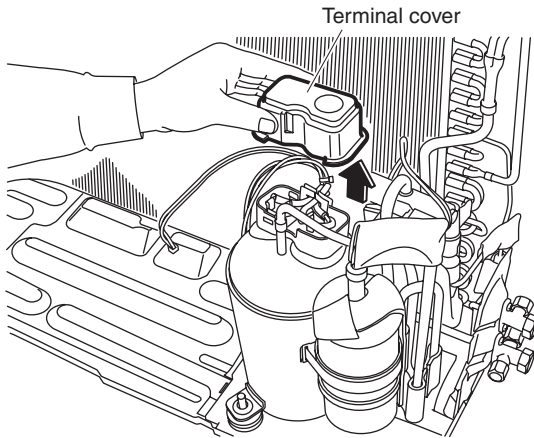
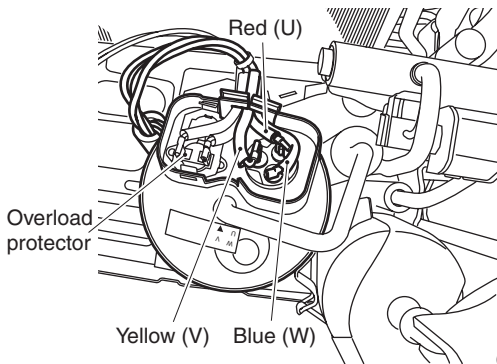
### Caution

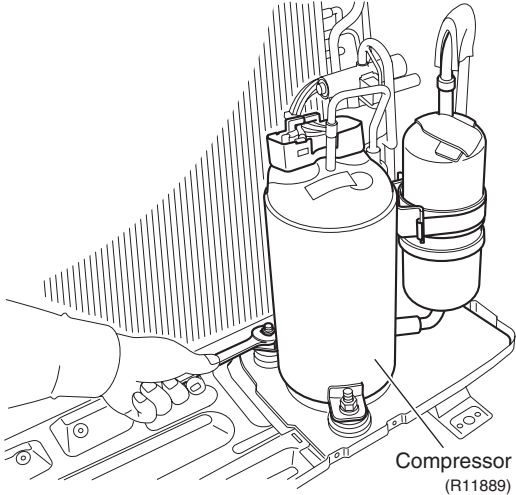
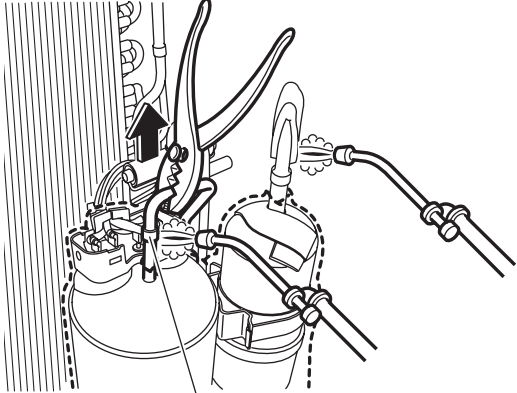
- ◆ From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.
- ◆ Restore the piping by non-oxidation brazing.



### 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	Procedure	Points
1	Remove the terminal cover.	 <p style="text-align: right;">(R7234)</p>	
2 3	Pull out the compressor lead wires. Remove the overload protector.	 <p style="text-align: right;">(R19540)</p>	

Step	Procedure	Points
4	<p>Remove the 2 nuts of the compressor.</p>  <p>Compressor (R11889)</p>	
5	<p>Heat up the brazed part of the discharge side and disconnect it.</p>	
6	<p>Heat up the brazed part of the suction side and disconnect it.</p>	
7	<p>Lift and remove the compressor.</p>  <p>Discharge side (R17227)</p>	



# Revision History

Month / Year	Version	Revised contents
09 / 2012	Si001267	First edition
11 / 2013	Si001267EA	Model addition: RKS25/35GVM4, RKS25/35GVMV, RKS25/35JVMG
02 / 2014	Si001267EB	Model addition: RKS25/35GVMV, RKD25/35/42HVMV

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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