

# REMOVAL PROCEDURE



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

### 2.5/3.5 kW Class

-  Outdoor Unit
-  Inverter
-  Pair Type



# **Service Manual Removal Procedure**

## **Outdoor Unit**

### **●Cooling Only**

**RKS25E2V1B  
RKS35E2V1B**

### **●Heat Pump**

**RXS25E2V1B  
RXS35E2V1B**

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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. Removal of Outer Panels / Fan Motor

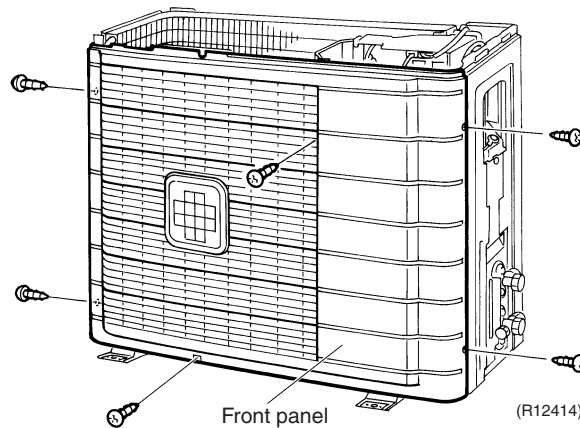
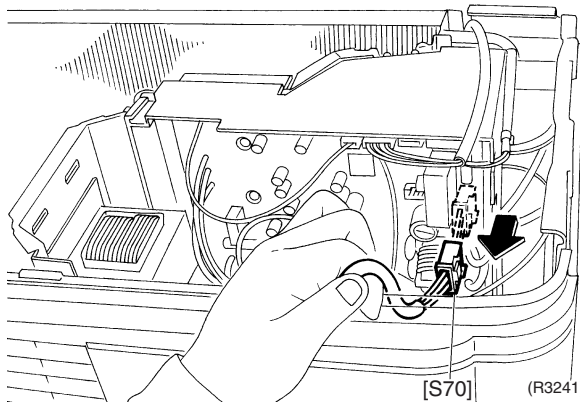
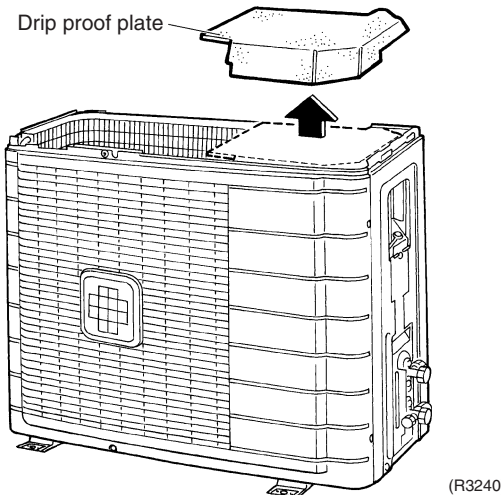
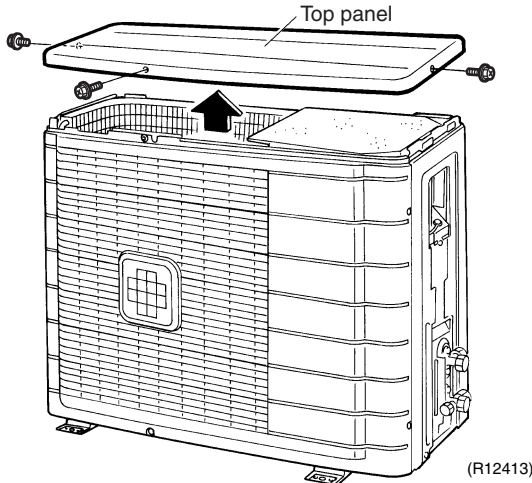
**Procedure**

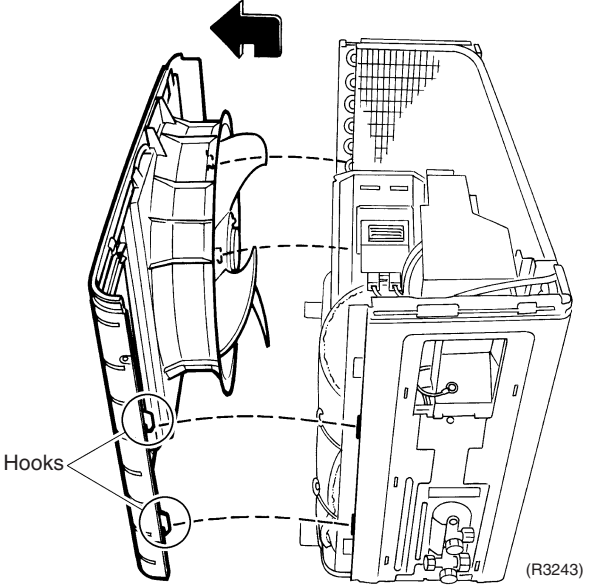
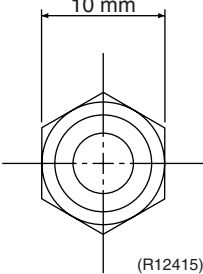
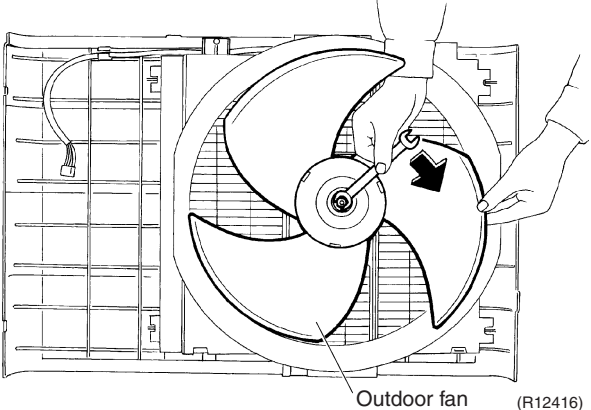
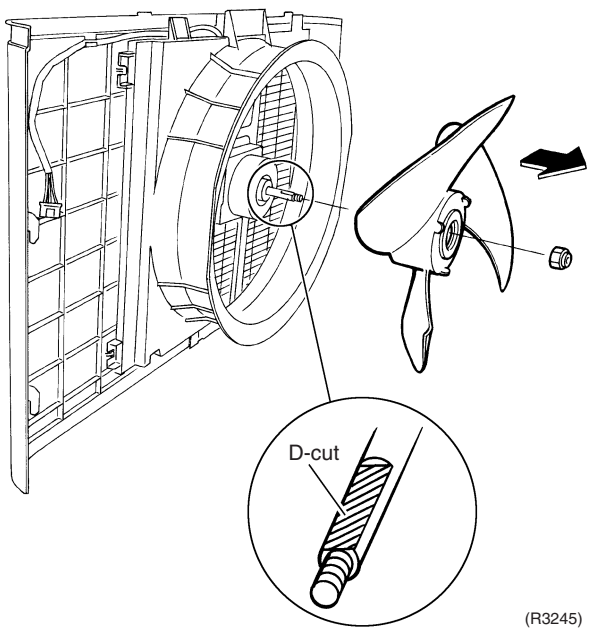


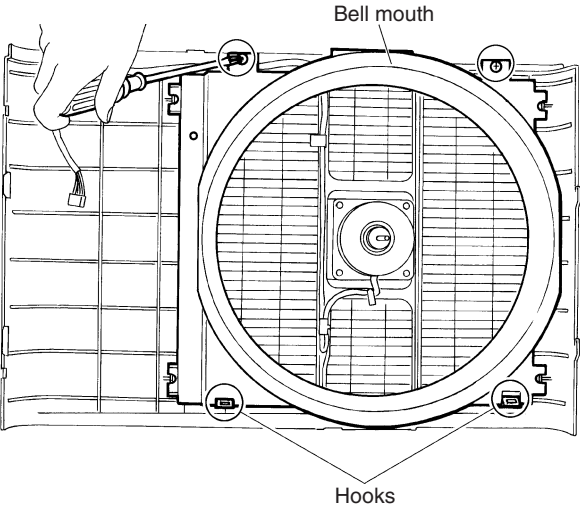
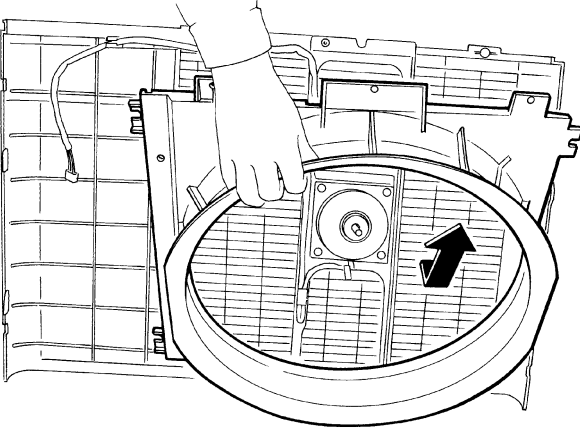
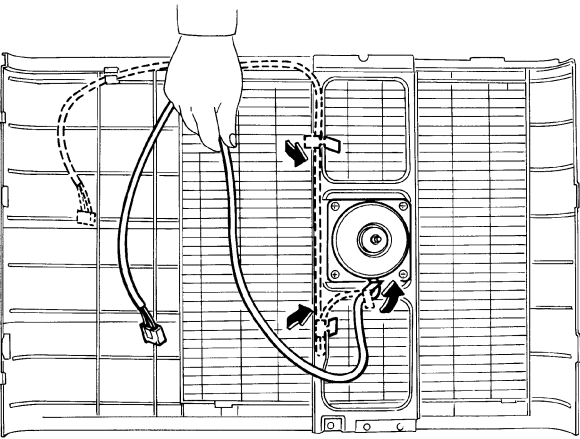
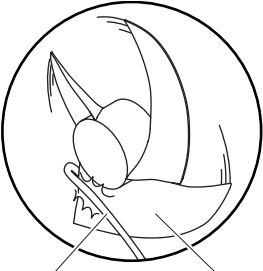
**Warning** Be sure to wait 10 minutes or more after turning off all power supplies before disassembling work.

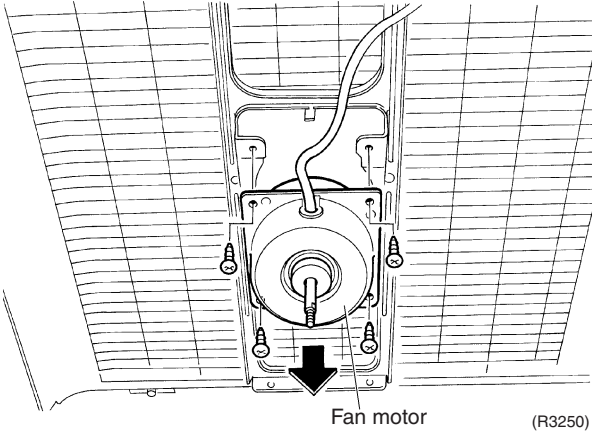
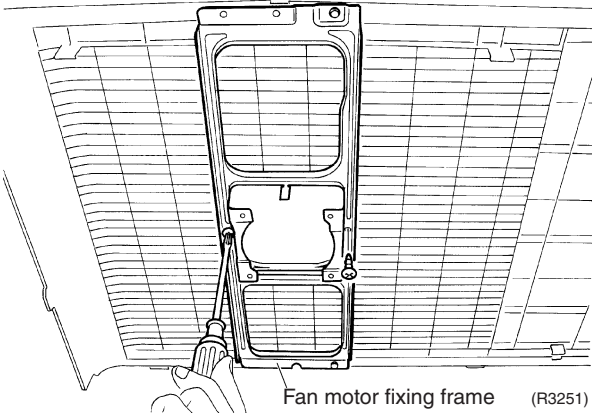
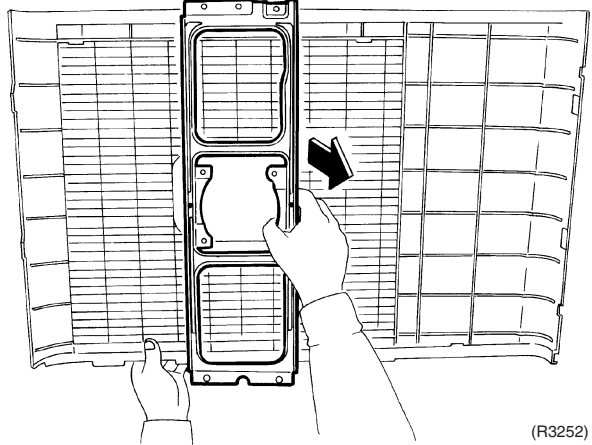
Step	Procedure	Points
<p>1. Appearance features</p>		<ul style="list-style-type: none"> <li>■ Take care not to cut your finger by the fins of the outdoor heat exchanger.</li> </ul>
<p>2. Remove the panels.</p> <p>1 Remove the screw of the stop valve cover. Pull down the stop valve cover and remove it.</p>		<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 5 hooks.</li> </ul>

Step	Procedure	Points
2	Remove the 3 screws and lift the top panel.	
3	Remove the drip proof plate.	
4	Disconnect the connector for the fan motor [S70].	<ul style="list-style-type: none"> <li>■ The fan motor is united with the front panel.</li> </ul>
5	Remove the 6 screws of the front panel.	

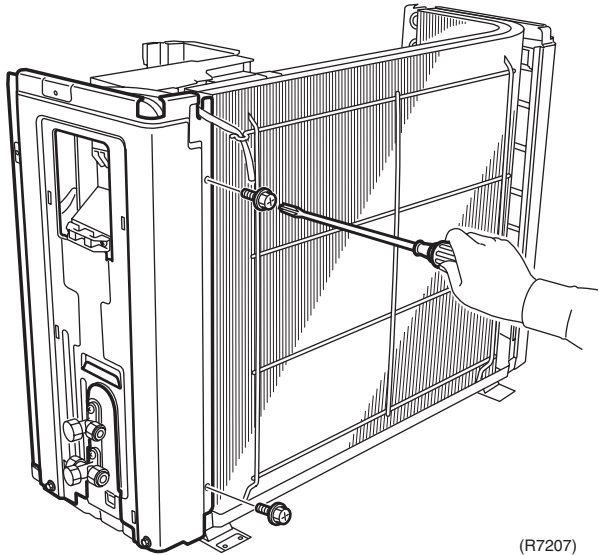
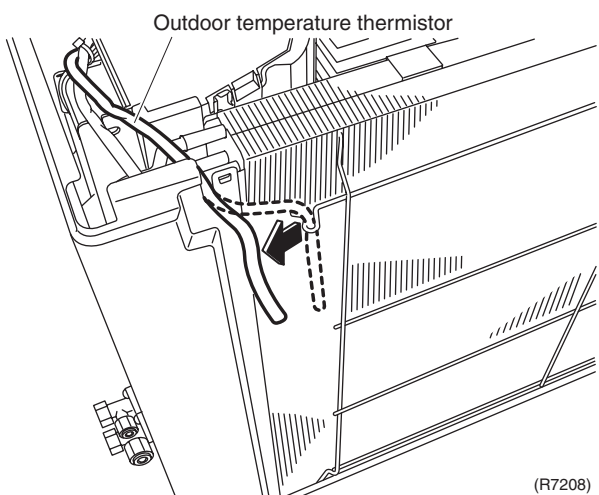
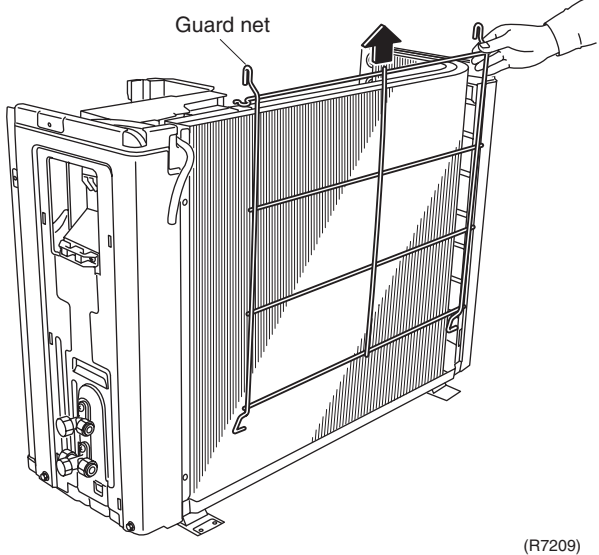


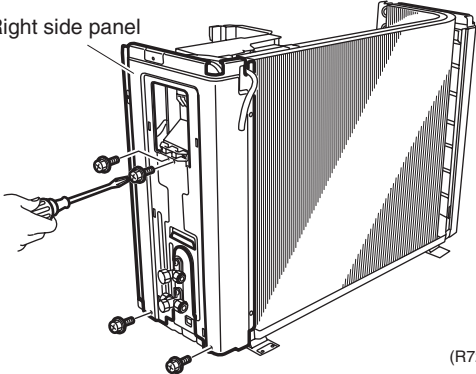
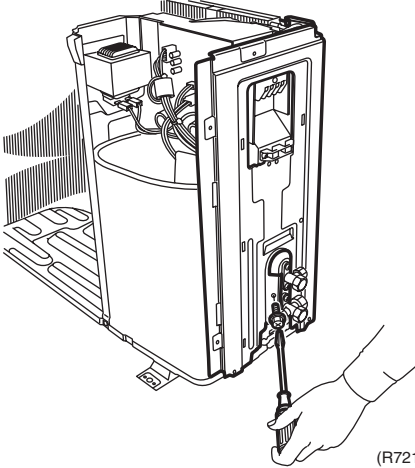
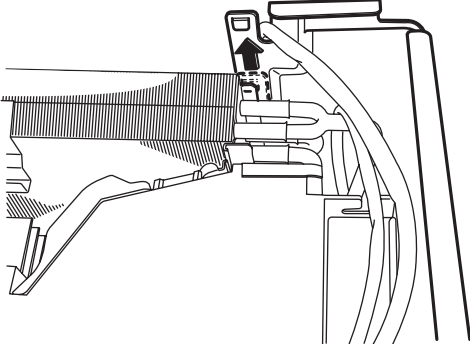
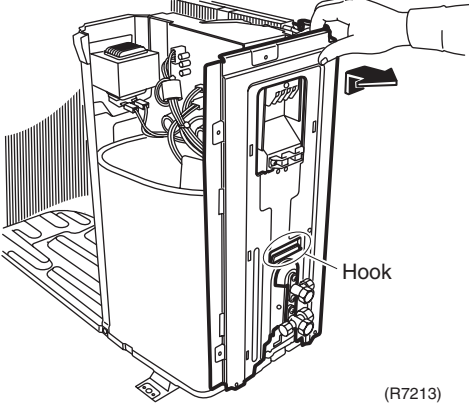
Step	Procedure	Points
6	<p>Unfasten the hooks. Pull and remove the front panel.</p>	<p>■ The front panel has 4 hooks.</p>
		
<p>3. Remove the fan motor.</p>		<p>■ Nut size: M6</p>
1	<p>Unscrew the washer-fitted nut of the outdoor fan.</p>	
		
2	<p>Remove the outdoor fan.</p>	<p>■ When reassembling, align the ▼ mark of the outdoor fan with the D-cut section of the motor shaft.</p>
		

Step	Procedure	Points
3	<p>Remove the 2 screws and lift the bell mouth to unfasten the hooks.</p>  <p style="text-align: right;">(R12422)</p>	
4	<p>Remove the bell mouth.</p>  <p style="text-align: right;">(R3247)</p>	
5	<p>Open the hooks and release the fan motor lead wire.</p>  <p style="text-align: right;">(R3248)</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>  <p style="text-align: right;">(R3249)</p>

Step	Procedure	Points
6	<p>Remove the 4 screws and remove the fan motor.</p> 	<p>■ M4×16</p>
7	<p>Remove the 2 screws and remove the fan motor fixing frame.</p>  	



Step	Procedure	Points
4. Remove the right side panel.	 <p>(R7207)</p>	
1 Remove the 2 screws on the rear side.	 <p>Outdoor temperature thermistor</p> <p>(R7208)</p>	
2 Release the outdoor temperature thermistor.	 <p>Guard net</p> <p>(R7209)</p>	
3 Lift up the guard net and remove it.		

Step	Procedure	Points
4	Remove the 4 screws on the right side panel.	
	 <p>Right side panel</p> <p>(R7210)</p>	
5	Remove the screw near the stop valves.	
	 <p>(R7211)</p>	
6	Unfasten the hook on the rear side.	<ul style="list-style-type: none"> <li>■ When reassembling, make sure to fit the hook.</li> </ul>
	 <p>(R7212)</p>	
7	Lift up the right side panel and remove it.	<ul style="list-style-type: none"> <li>■ When reassembling, make sure to fit the hook.</li> </ul>
	 <p>Hook</p> <p>(R7213)</p>	

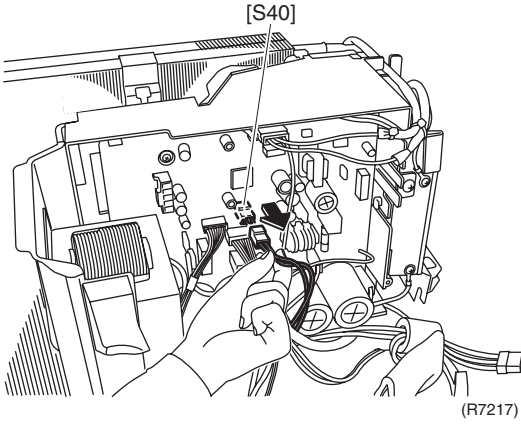
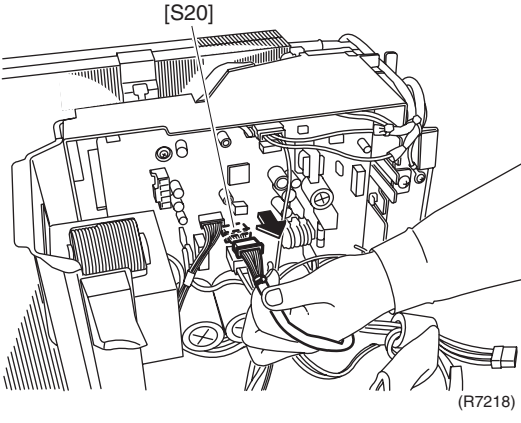
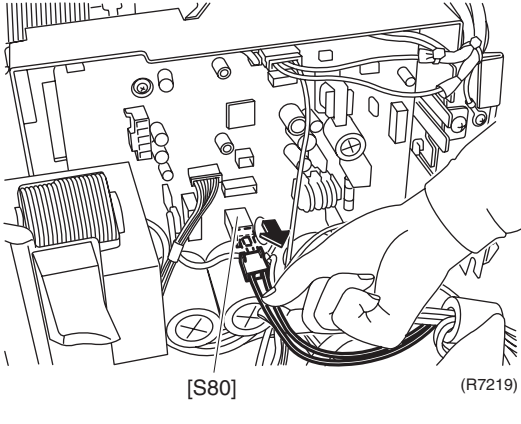
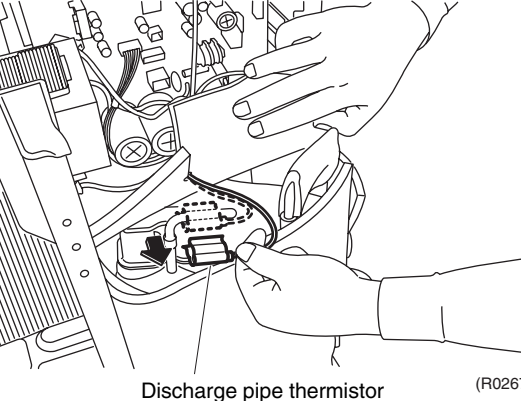
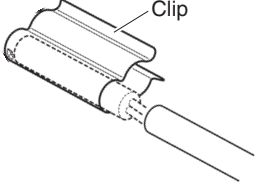
## 2. Removal of Electrical Box

### Procedure

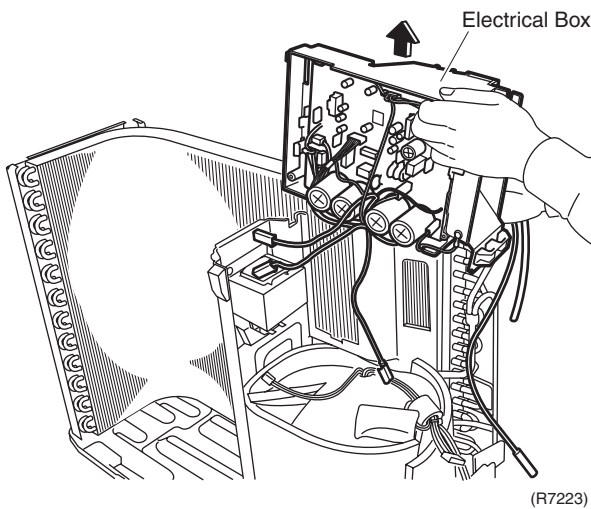
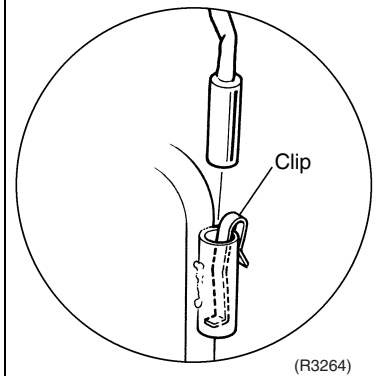
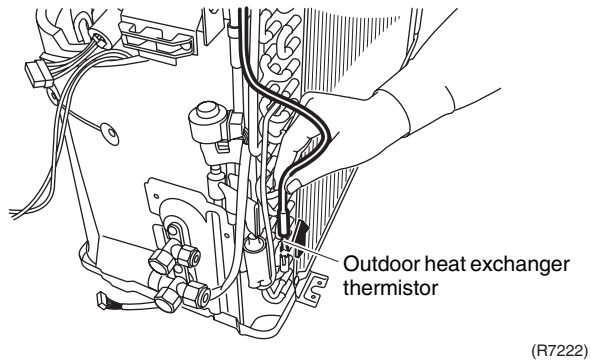
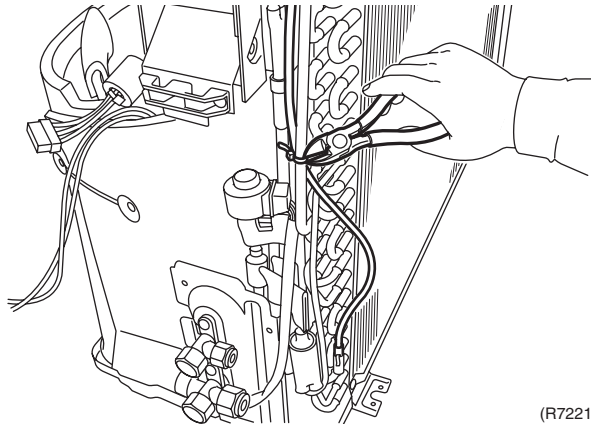


**Warning** Be sure to wait 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1. Remove the electrical box.	<p>(R7214)</p>	<p><b>Preparation</b></p> <ul style="list-style-type: none"> <li>Remove the panels and disconnect the connector for the fan motor according to "Removal of Outer Panels / Fan Motor".</li> </ul>
1 Disconnect the 2 connectors for the reactor.	<p>(R7215)</p>	
2 Cut the clamp.	<p>[S30]</p> <p>(R7216)</p>	<ul style="list-style-type: none"> <li>When reassembling, coil the excessive lead wire and hang the loop on the hook.</li> </ul>
3 Disconnect the connector for the compressor [S30].		

Step	Procedure	Points
4	Disconnect the connector for overload protector [S40].	
5	Disconnect the connector for electronic expansion valve coil [S20].	
6	Disconnect the connector for four way valve coil [S80].	
7	Release the discharge pipe thermistor.	 <p style="text-align: center;">Discharge pipe thermistor (R0267)</p>
		<p>■ Be careful not to lose the clip for the thermistor.</p>  <p style="text-align: right;">(R12279)</p>

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



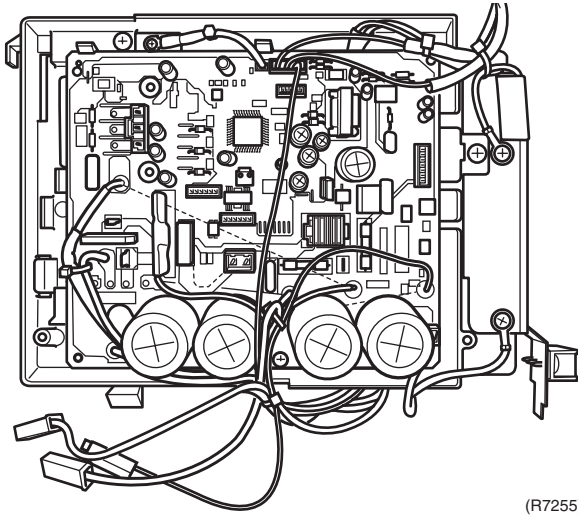
### 3. Removal of PCB

**Procedure**

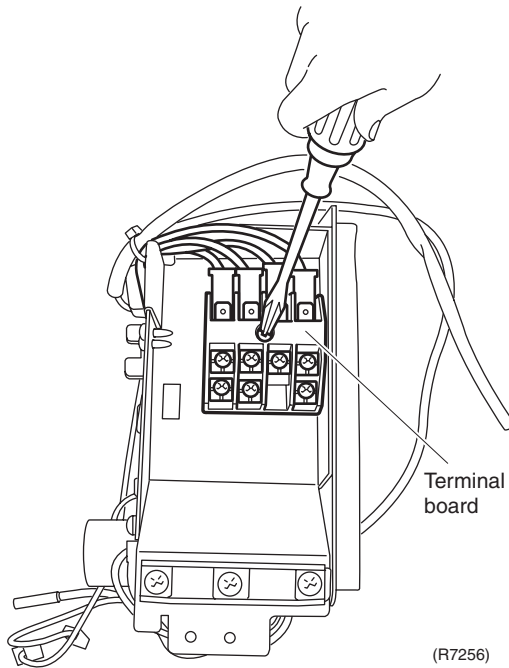


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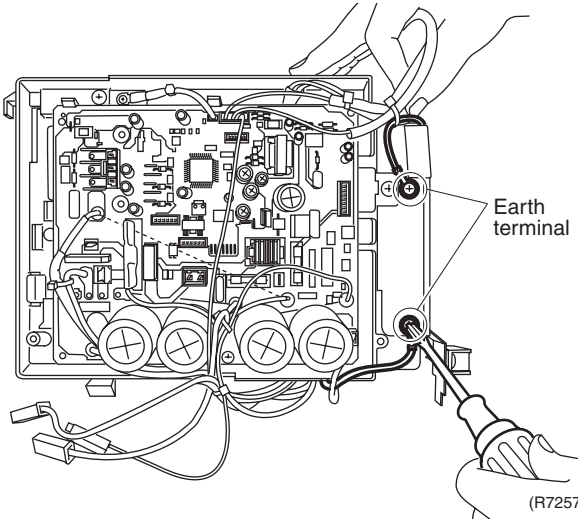
Step	Procedure	Points
1	Feature of the main PCB	<ul style="list-style-type: none"> <li>You can remove the main PCB when you disconnect the lead wires on the terminal board without removing the electrical box.</li> </ul>
2	Remove the screw on the terminal board.	
3	Release the 2 earth terminals.	



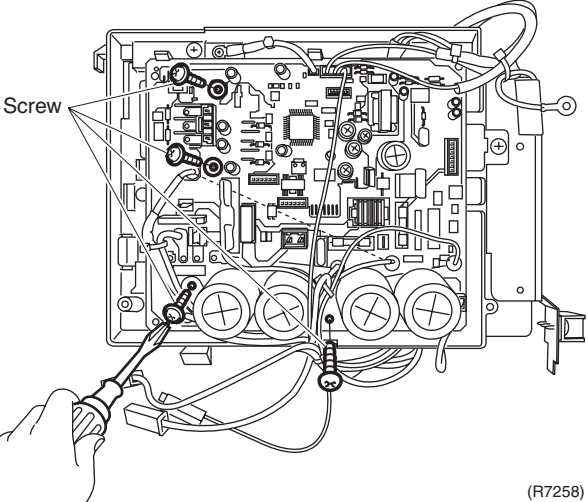
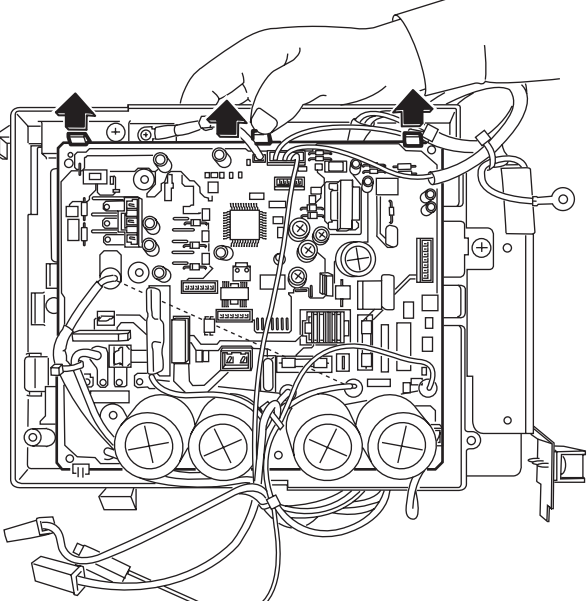
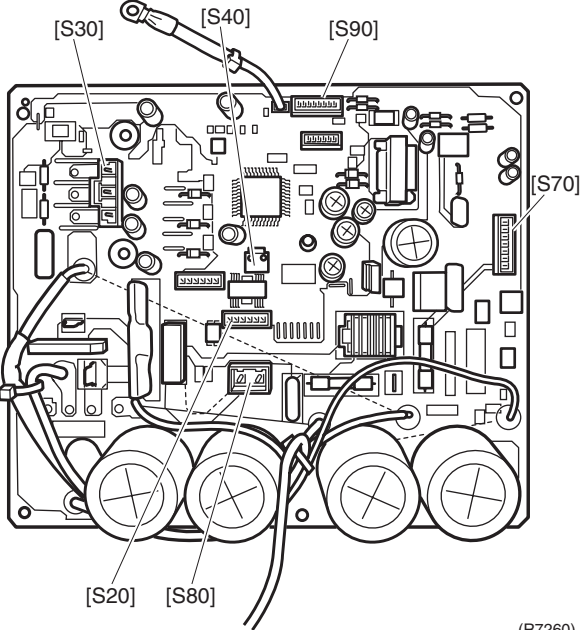
(R7255)



(R7256)



(R7257)

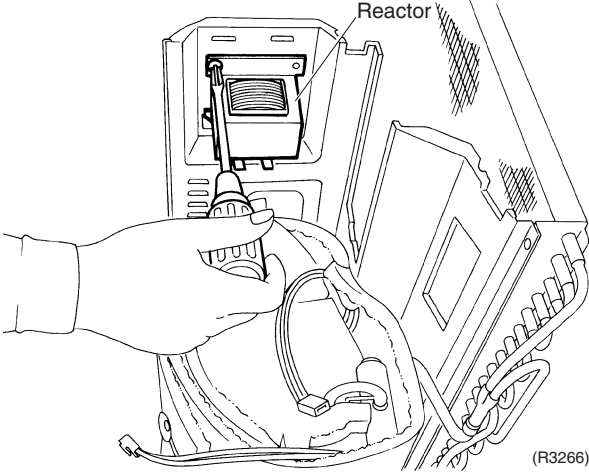
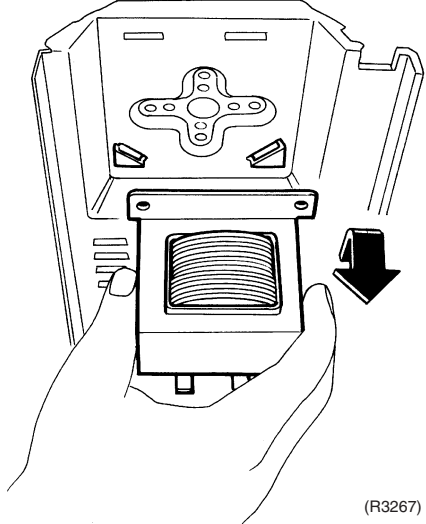
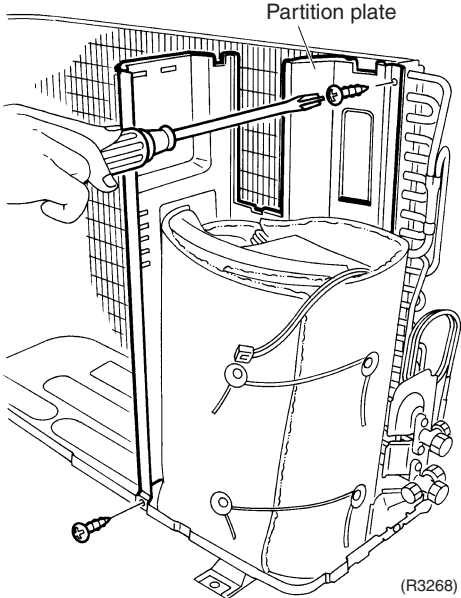
Step	Procedure	Points
4	<p>Remove the 4 screws.</p>  <p style="text-align: right;">(R7258)</p>	
5	<p>Unfasten the 3 hooks on the upper side.</p>	
6	<p>Lift and pull out the control PCB.</p>  <p style="text-align: right;">(R7259)</p>  <p style="text-align: right;">(R7260)</p>	<p>[S20]: electronic expansion valve coil          [S30]: compressor          [S40]: overload protector          [S70]: fan motor          [S80]: four way valve coil          [S90]: thermistors</p>

# 4. Removal of Reactor / Partition Plate

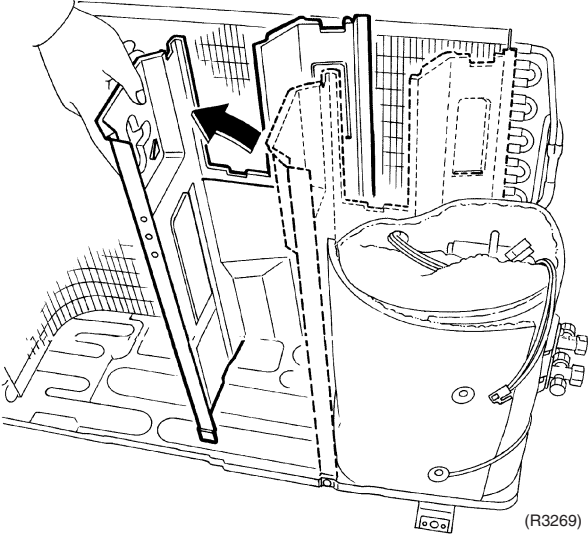
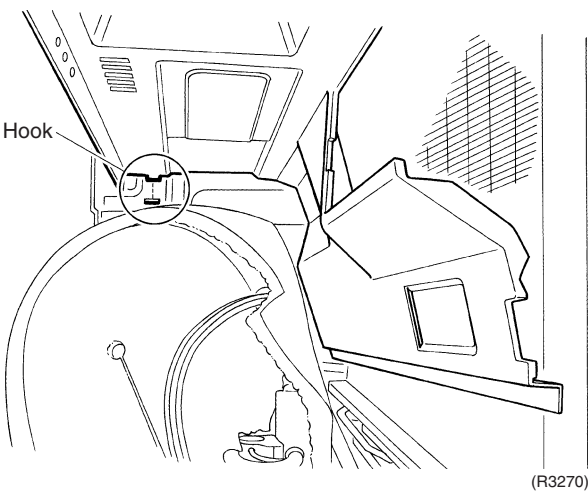
**Procedure**



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

Step	Procedure	Points
<p>1. Remove the reactor.</p> <p>1 Remove the screw and remove the reactor.</p>	 <p>(R3266)</p>  <p>(R3267)</p>	<p><b>Preparation</b></p> <ul style="list-style-type: none"> <li>■ Remove the outer panels according to the "Removal of Outer Panels / Fan Motor".</li> <li>■ Remove the electrical box according to the "Removal of Electrical Box".</li> </ul>
<p>2. Remove the partition plate.</p> <p>1 Remove the 2 screws.</p>	 <p>(R3268)</p>	



Step	Procedure	Points
2	<p data-bbox="199 219 454 376">The partition plate has a hook on the lower side. Lift and pull the partition plate to remove.</p>  <p data-bbox="1013 743 1070 766">(R3269)</p>  <p data-bbox="1013 1265 1070 1288">(R3270)</p>	<ul data-bbox="1093 795 1444 884" style="list-style-type: none"><li>■ When reassembling, fit the lower hook into the bottom frame.</li></ul>

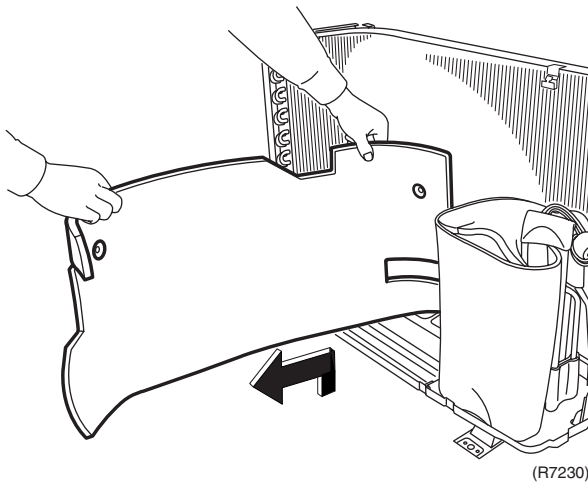
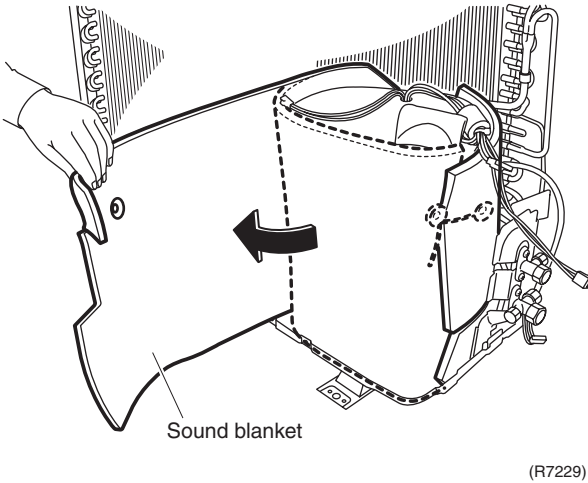
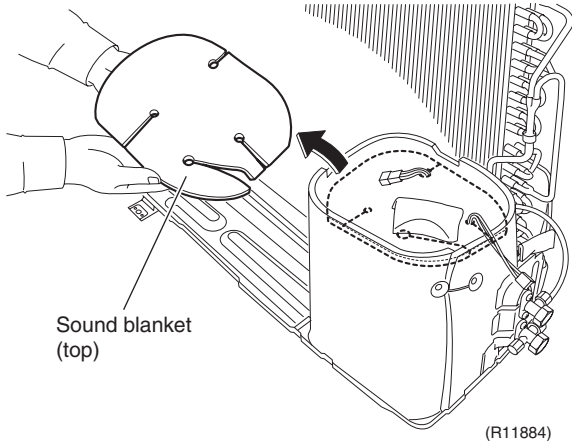
# 5. Removal of Sound Blanket

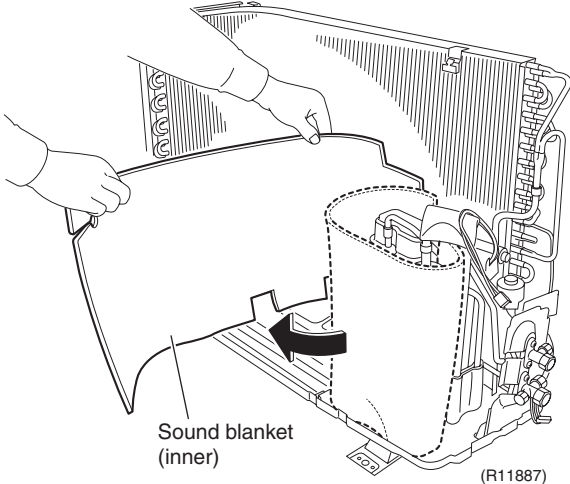
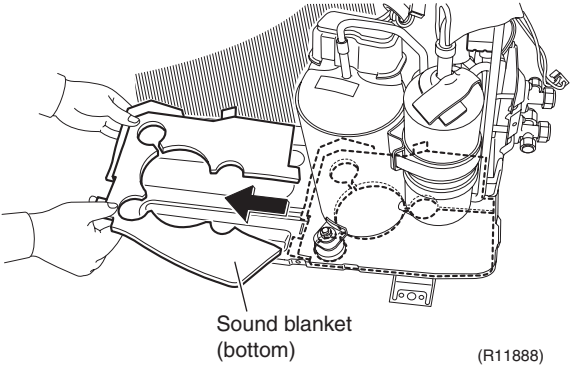
**Procedure**



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Step	Procedure	Points
1	Remove the sound blanket (top).	<ul style="list-style-type: none"> <li>Since the piping ports are torn easily, remove the sound blanket carefully.</li> </ul>
2	Untie the string and open the sound blanket (outer).	
3	Lift and remove the sound blanket (outer).	



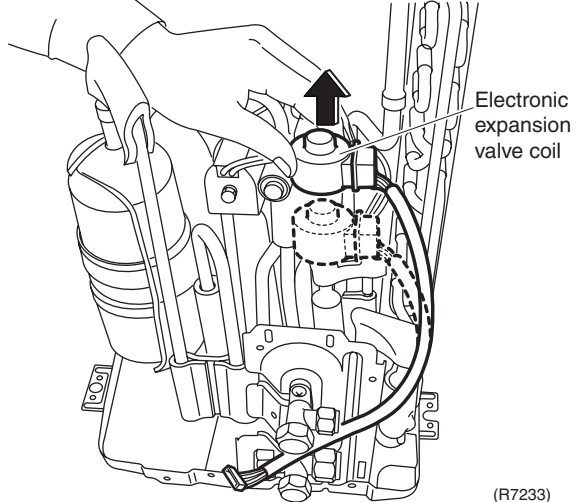
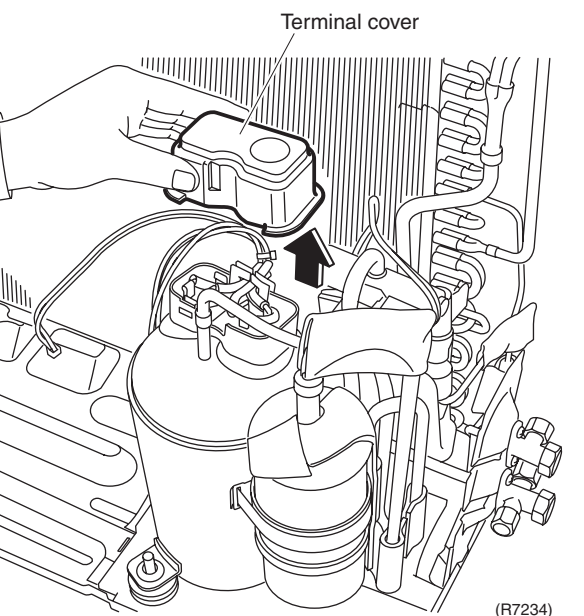
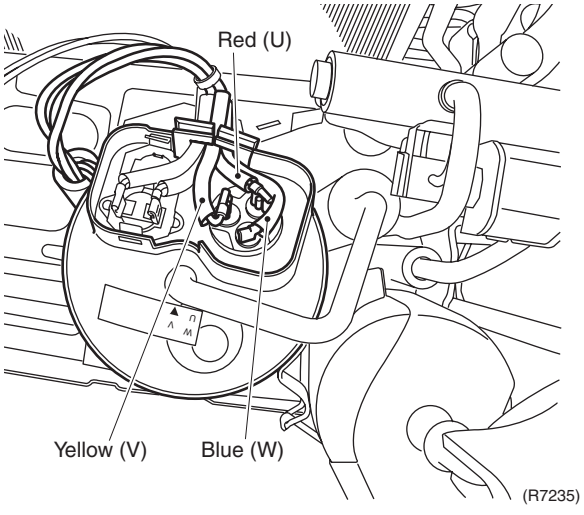
Step	Procedure	Procedure	Points
4	Pull the sound blanket (inner) out.	 <p>Sound blanket (inner)</p> <p>(R11887)</p>	
5	Pull the sound blanket (bottom) out.	 <p>Sound blanket (bottom)</p> <p>(R11888)</p>	

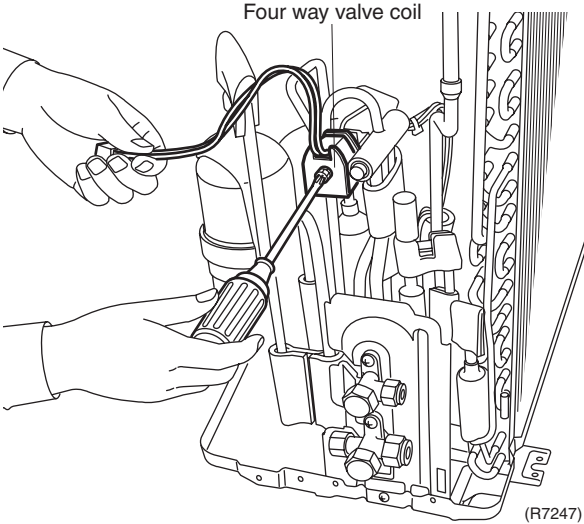
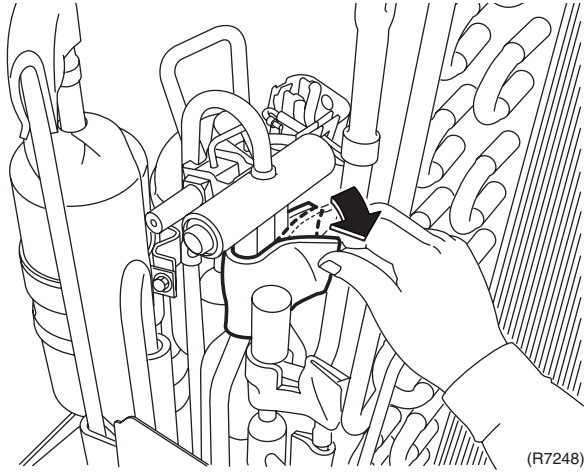
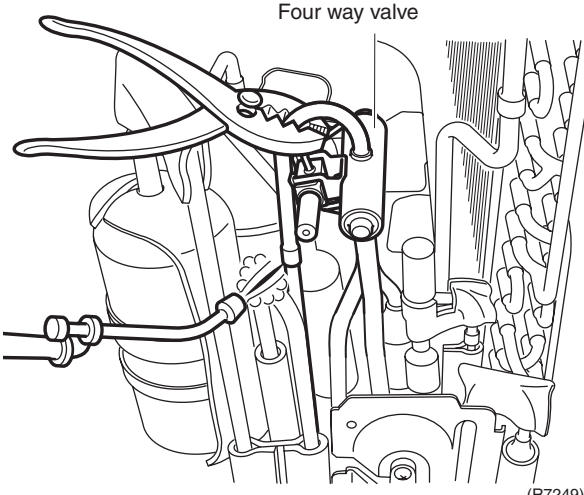
# 6. Removal of Four Way Valve

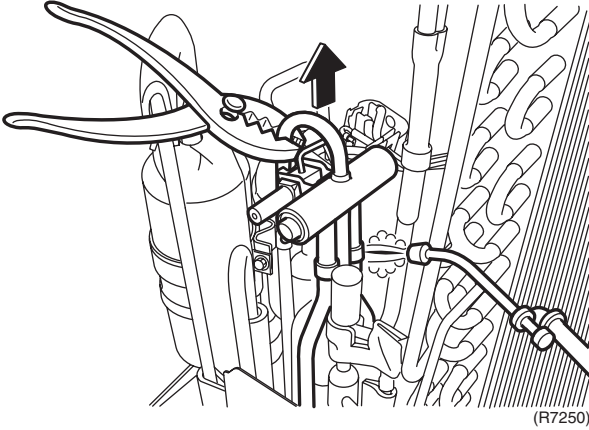
**Procedure**



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

Step	Procedure	Procedure	Points
1	Pull out the electronic expansion valve coil.	 <p style="text-align: right;">(R7233)</p>	
2	Remove the terminal cover.	 <p style="text-align: right;">(R7234)</p>	
3	Disconnect the lead wires of the compressor.	 <p style="text-align: right;">(R7235)</p>	

Step	Procedure	Points
4	<p>Remove the screw and remove the four way valve coil.</p> 	<p><b>Warning</b> Be careful not to get yourself burnt with the pipes and other parts that are heated by the gas brazing machine.</p> <p><b>Warning</b> If the refrigerant gas leaks during work, ventilate the room. (If the refrigerant gas is exposed to flames, toxic gas may be generated.)</p> <p><b>Caution</b> From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.</p>
5	<p>Remove the sheets of putty.</p> 	<p><b>Cautions for restoration</b></p> <ol style="list-style-type: none"> <li>1. Restore the piping by non-oxidation brazing.</li> <li>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.) For the sake of this, wrap the four way valve with wet cloth and provide water so that the cloth does not dry.</li> </ol>
6	<p>Heat up the brazed part and withdraw the piping with pliers.</p> 	<p><b>In case of difficulty with gas brazing machine</b></p> <ol style="list-style-type: none"> <li>1. Disconnect the brazed part where is easy to disconnect and restore.</li> <li>2. Cut pipes on the main unit with a tube cutter in order to make it easy to disconnect.</li> </ol>

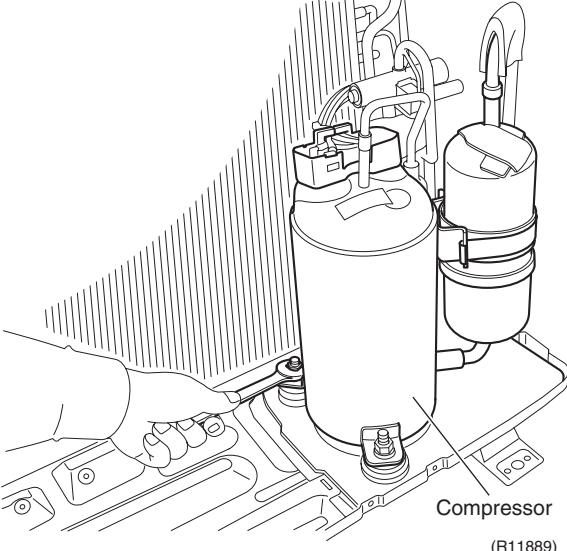
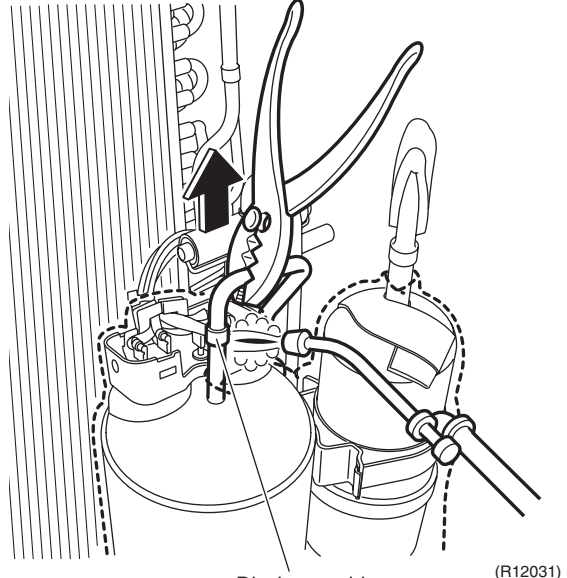
Step	Procedure	Points
	 <p>(R7250)</p>	<p><b>Note:</b></p> <ul style="list-style-type: none"><li>■ Do not use a metal saw for cutting pipes by all means because the sawdust comes into the circuit.</li><li>■ When withdrawing the pipes, be careful not to pinch them firmly with pliers. The pipes may get deformed.</li><li>■ Provide a protective sheet or a steel plate so that the brazing flame cannot influence peripheries.</li></ul>

## 7. Removal of Compressor

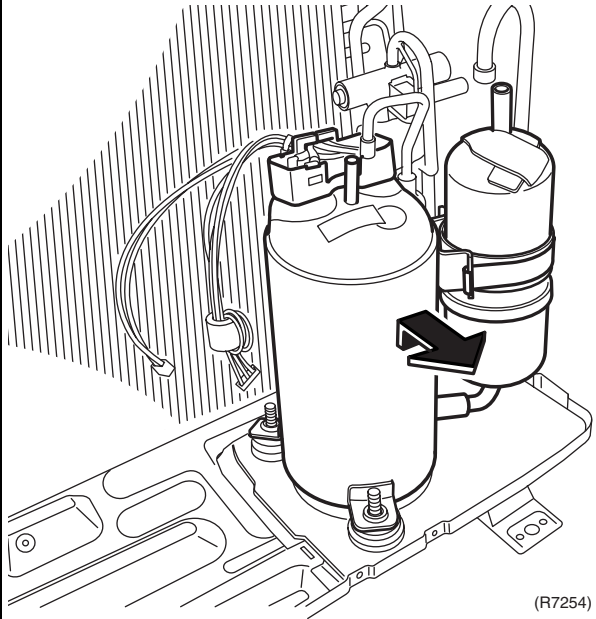
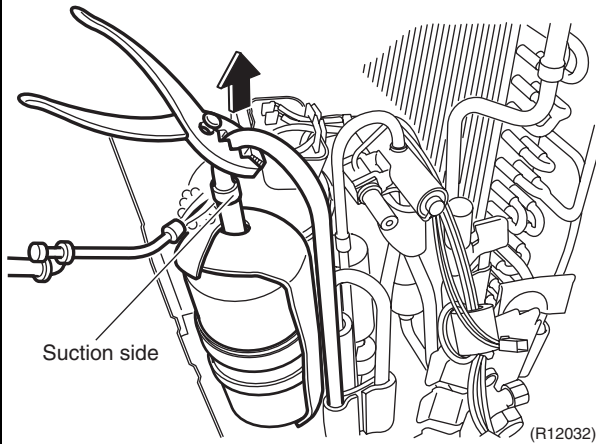
### Procedure



**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 nuts of the compressor. 	<p><b>Warning</b> Be careful not to get yourself burnt with the pipes and other parts that are heated by the gas brazing machine.</p> <p><b>Warning</b> If the refrigerant gas leaks during work, ventilate the room. (If the refrigerant gas is exposed to flames, toxic gas may be generated.)</p> <p><b>Warning</b> Since it may happen that the refrigerant oil in the compressor catches fire, prepare wet cloth so as to extinguish fire immediately.</p>
<ul style="list-style-type: none"> <li>■ Before working, make sure that the refrigerant is empty in the circuit.</li> <li>■ Be sure to apply nitrogen replacement when heating up the brazed part.</li> </ul>		<p><b>Caution</b> From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.</p>
2	Heat up the brazed part of the discharge side and disconnect.	<p><b>Cautions for restoration</b></p> <ol style="list-style-type: none"> <li>1. Restore the piping by non-oxidation brazing.</li> <li>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.) For the sake of this, wrap the four way valve with wet cloth and provide water so that the cloth does not dry.</li> </ol> <p><b>In case of difficulty with gas brazing machine</b></p> <ol style="list-style-type: none"> <li>1. Disconnect the brazed part where is easy to disconnect and restore.</li> <li>2. Cut pipes on the main unit with a tube cutter in order to make it easy to disconnect.</li> </ol>

Step	Procedure	Points
3	Heat up the brazed part of the suction side and disconnect.	<p><b>Note:</b></p> <ul style="list-style-type: none"> <li>■ Do not use a metal saw for cutting pipes by all means because the sawdust comes into the circuit.</li> <li>■ When withdrawing the pipes, be careful not to pinch them firmly with pliers. The pipes may get deformed.</li> <li>■ Provide a protective sheet or a steel plate so that the brazing flame cannot influence peripheries.</li> </ul>
4	Lift the compressor up and remove it.	<ul style="list-style-type: none"> <li>■ Be careful so as not to burn the compressor terminals, the name plate, the heat exchanger fin.</li> </ul>





# Revision History

Month / Year	Version	Revised contents
01 / 2013	Si001071	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

### **DAIKIN INDUSTRIES, LTD.**

Head Office:  
Umeda Center Bldg., 2-4-12, Nakazaki-Nishi,  
Kita-ku, Osaka, 530-8323 Japan

Tokyo Office:  
JR Shinagawa East Bldg., 2-18-1, Konan,  
Minato-ku, Tokyo, 108-0075 Japan

[http://www.daikin.com/global\\_ac/](http://www.daikin.com/global_ac/)

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