

# REMOVAL PROCEDURE



SERVICE  
MANUAL

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

## 4.2/4.6 kW Class

-  Outdoor Unit
-  Inverter
-  Pair Type



# **Service Manual Removal Procedure**

## **Outdoor Unit**

●Cooling Only  
RKS42G2V1B

●Heat Pump  
ARXS42G2V1B

RXS42G2V1B

RXS46GV2C

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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

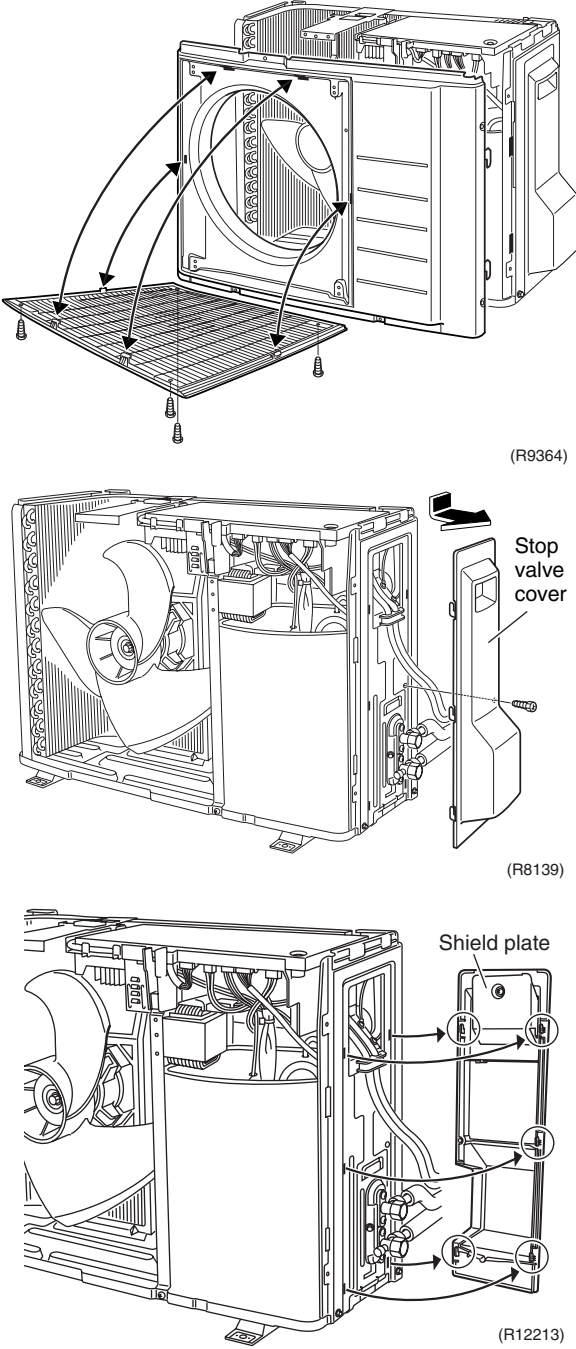
**Procedure**



**Warning**

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

Step	Procedure	Points
<p>1. Features</p>		<p>★ Illustrations are slightly different depending on the model.</p> <p>■ Some models do not have guard nets.</p>
<p>2. Remove the panels.</p> <p>1 Remove the 2 screws to remove the top panel, and 7 screws to remove the front panel.</p>		<p>■ The front panel has 4 hooks.</p>

Step	Procedure	Points
2	Remove the 4 screws and remove the discharge grille.	<ul style="list-style-type: none"> <li>■ When reassembling, make sure to fit the 4 hooks.</li> </ul>
3	Remove the screw and remove the stop valve cover.	<ul style="list-style-type: none"> <li>■ The stop valve cover is united with the shield plate.</li> </ul>
	 <p>The diagram illustrates the removal of the discharge grille (R9364) and the stop valve cover (R8139) and shield plate (R12213) from the washing machine. The discharge grille is shown being lifted out of the front panel. The stop valve cover and shield plate are shown being removed from the back panel. The shield plate is shown being lifted out of the back panel, revealing the stop valve cover and the internal components.</p>	<ul style="list-style-type: none"> <li>■ When reassembling, make sure to fit the 5 hooks.</li> </ul>

## 2. Removal of Electrical Box

**Procedure**

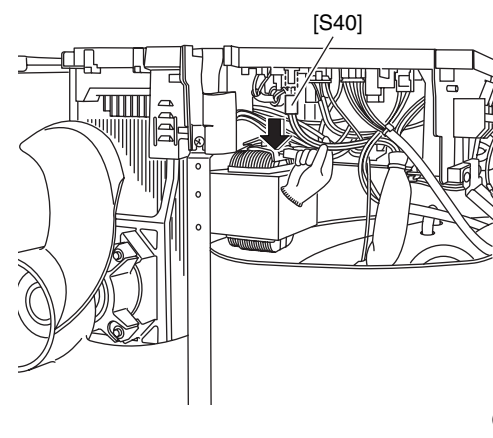
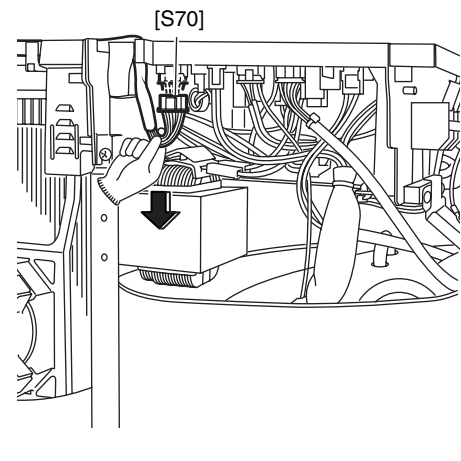
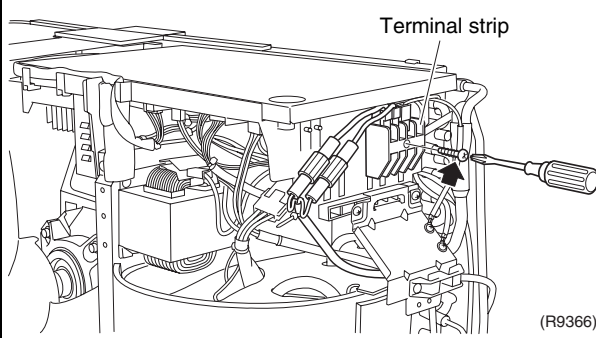
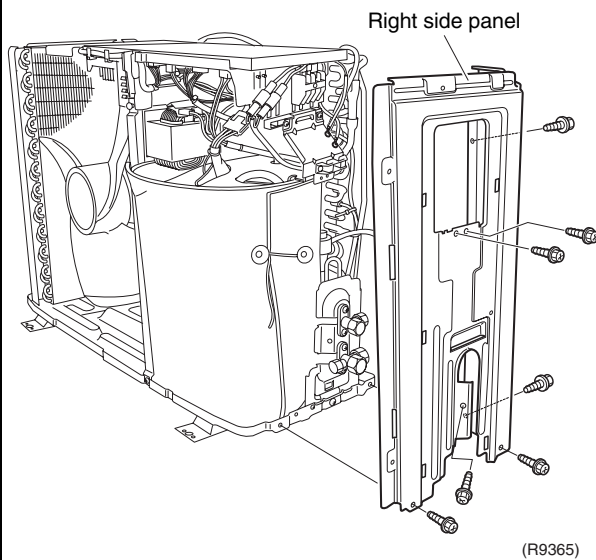


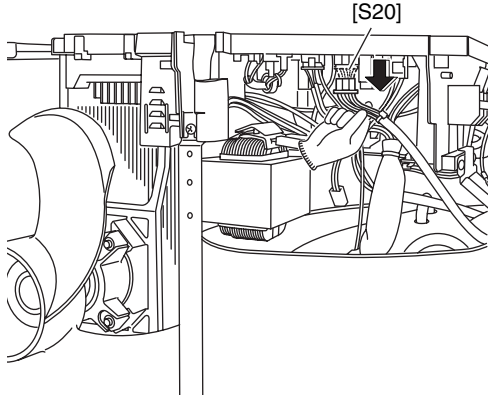
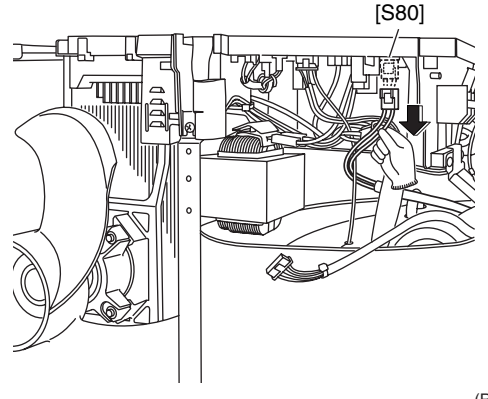
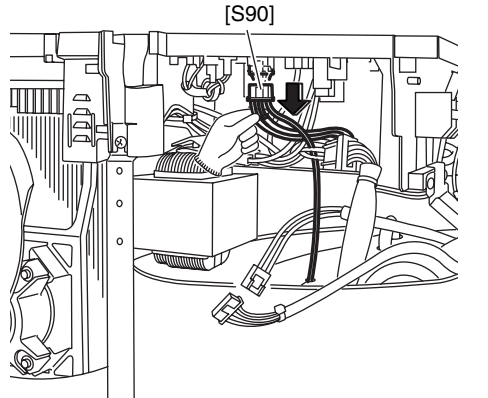
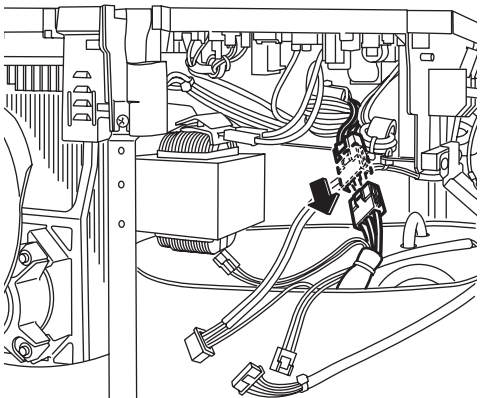
**Warning**

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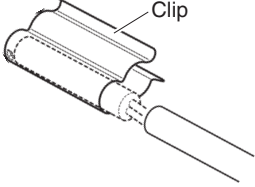
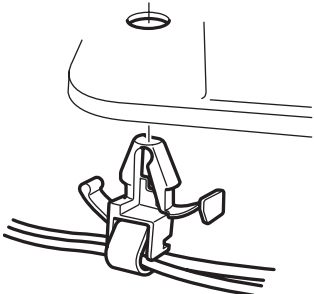
Step	Procedure	Points
<p>1. Disconnect the connecting wires.</p> <p>1 Remove the 3 screws to remove the wiring fixture. Then remove the all screws to disconnect the power supply cables and the connecting wires.</p>	<p style="text-align: right;">(R12192)</p>	<ul style="list-style-type: none"> <li>■ When reassembling, fasten the wires with screws on the terminal board.</li> </ul>
<p>2. Remove the electrical box.</p> <p>1 Release the outdoor temperature thermistor.</p> <p>2 Lift up the guard net and remove it.</p>	<p style="text-align: right;">(R12193)</p> <p style="text-align: right;">(R8143)</p>	

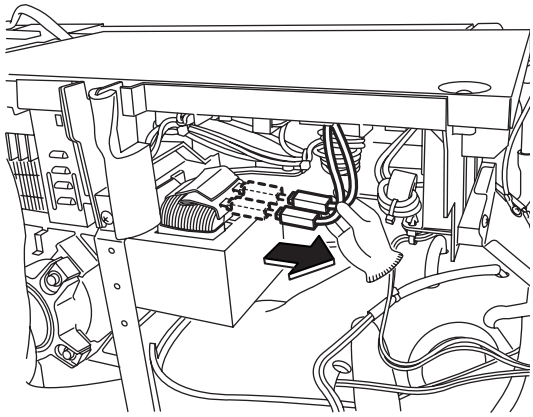
Step	Procedure	Points
3	Remove the 7 screws, and remove the right side panel.	
4	Remove the screw of the terminal board.	
5	Disconnect the connector for the fan motor [S70].	<ul style="list-style-type: none"> <li>■ For removal procedure of the fan motor lead wire, refer to "Removal of Outdoor Fan / Fan Motor".</li> </ul>
6	Disconnect the connector for the overload protector [S40].	



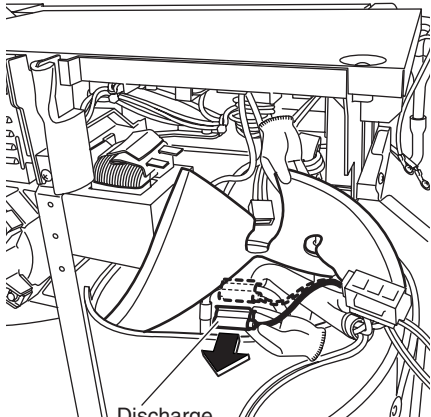
Step	Procedure	Points	
7	Disconnect the connector for the electronic expansion valve coil [S20].	 <p>(R0256)</p>	<p>■ The cooling only models do not have the harness for [S80].</p>
8	Disconnect the connector for the four way valve coil [S80].	 <p>(R0257)</p>	
9	Disconnect the connector for the thermistors [S90].	 <p>(R0258)</p>	
10	Disconnect the relay connector for the compressor.	 <p>(R0259)</p>	



Step	Procedure	Points
11	Disconnect the 2 connectors for the reactor.	
12	Release the discharge pipe thermistor.	<p>■ Be careful not to lose the clip for the thermistor.</p>  <p>Clip</p> <p>(R12279)</p>
13	Detach the clamp for the thermistors from the electrical box.	 <p>(R12196)</p>
14	Remove the screw in front of the electrical box.	

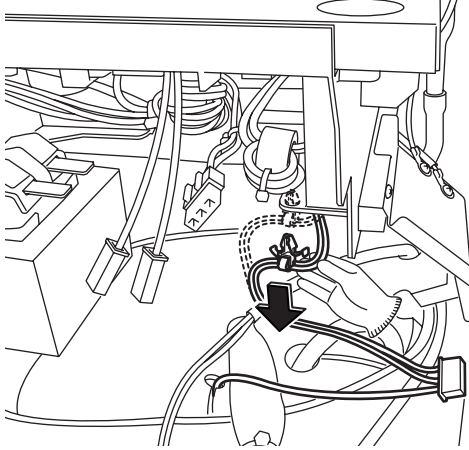


(R0260)

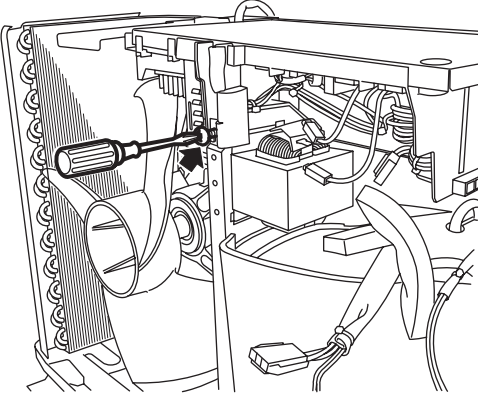


Discharge pipe thermistor

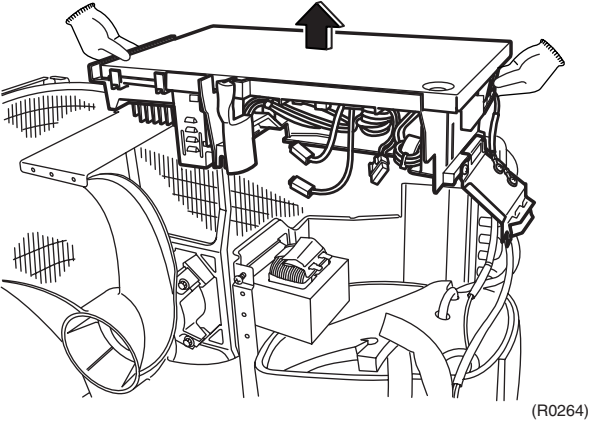
(R12197)



(R0262)



(R0263)

Step	Procedure	Points	
15	Lift and remove the electrical box.	 <p>(R0264)</p>	

### 3. Removal of PCB

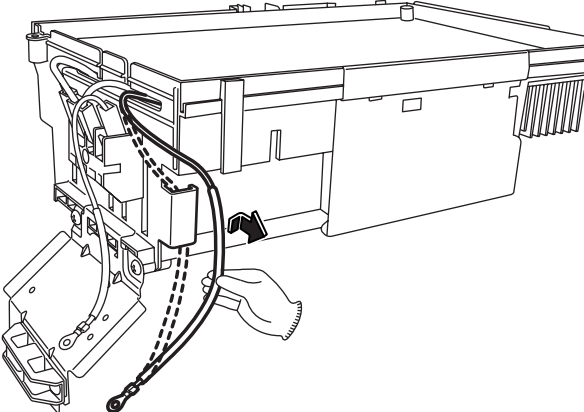
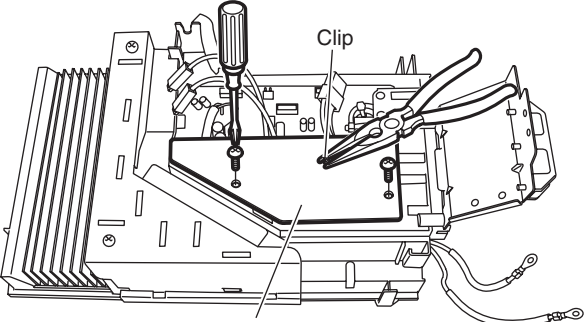
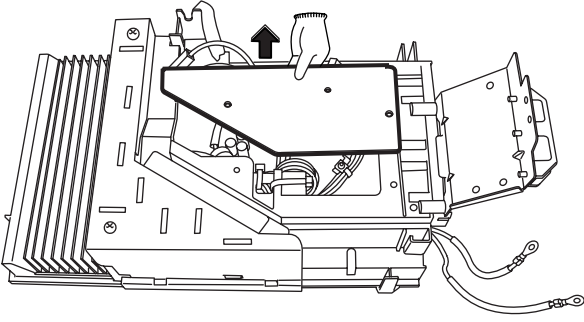
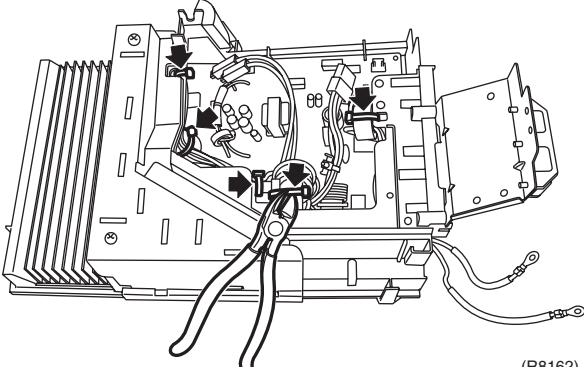
#### Procedure

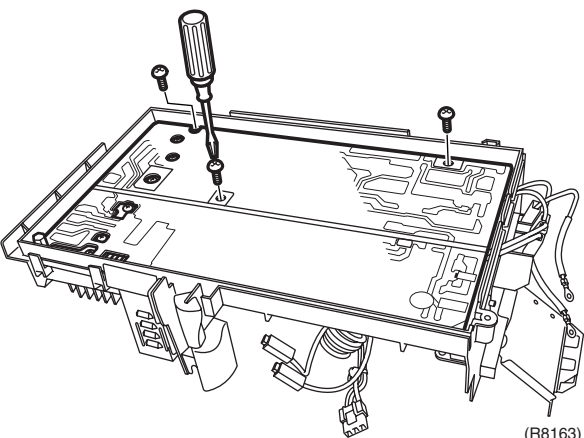
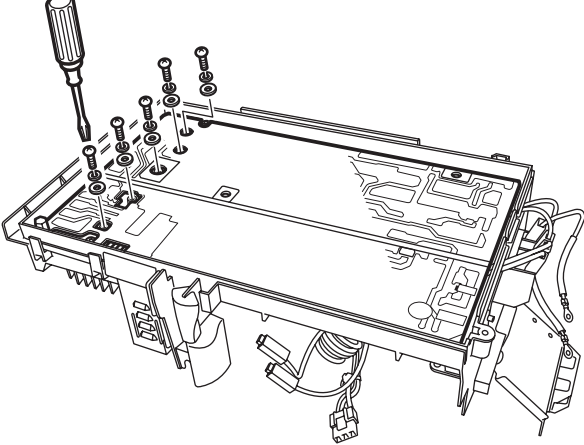
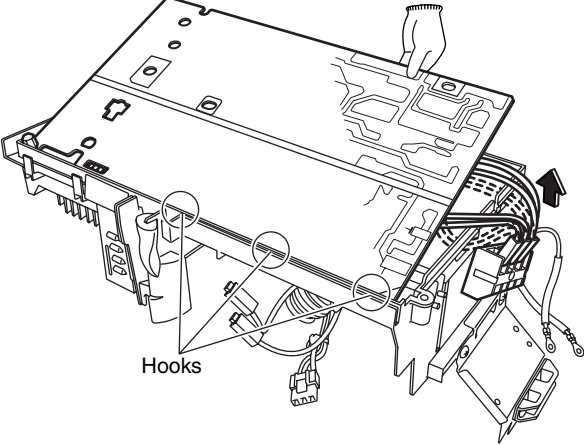
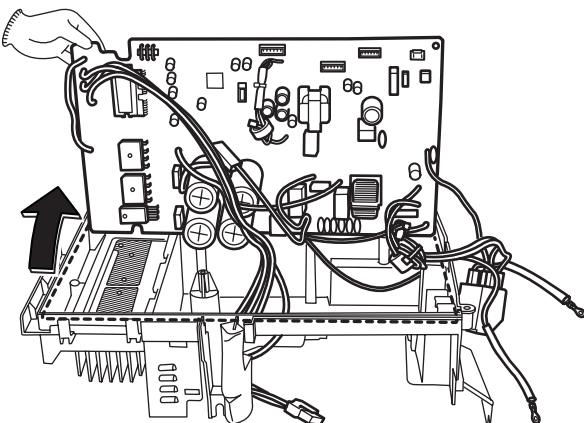


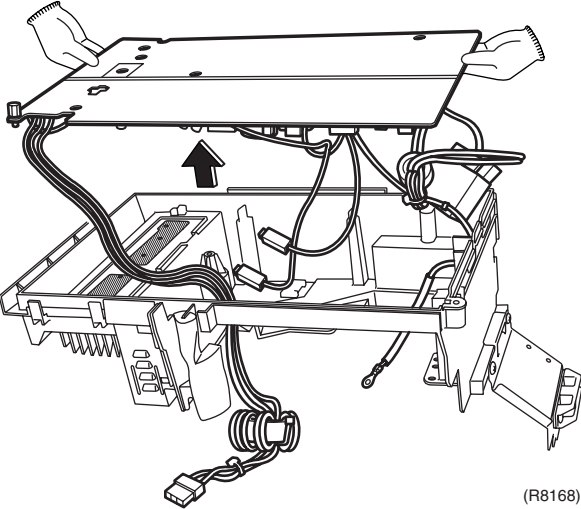
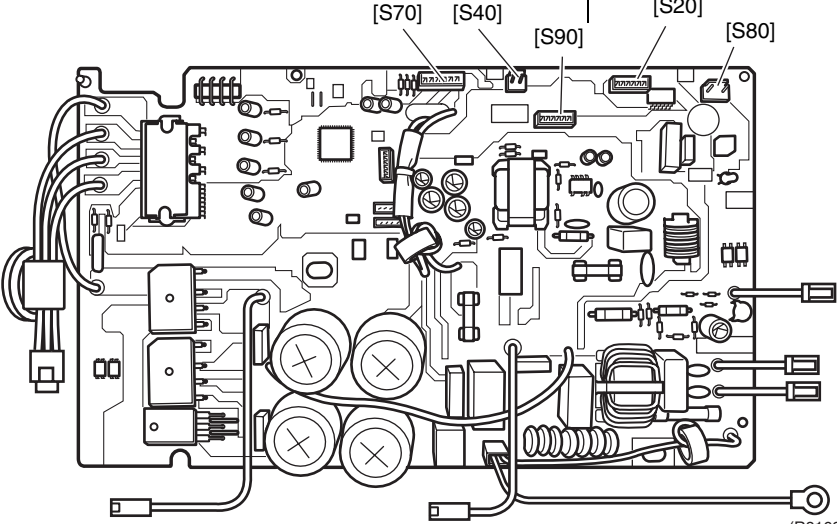
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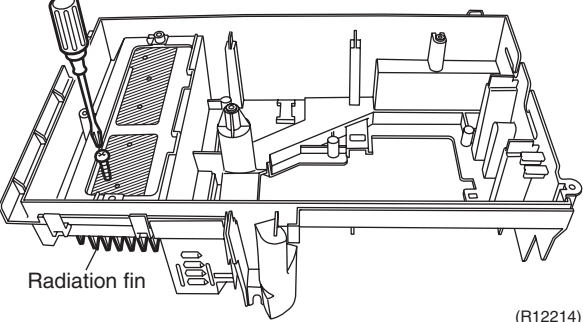
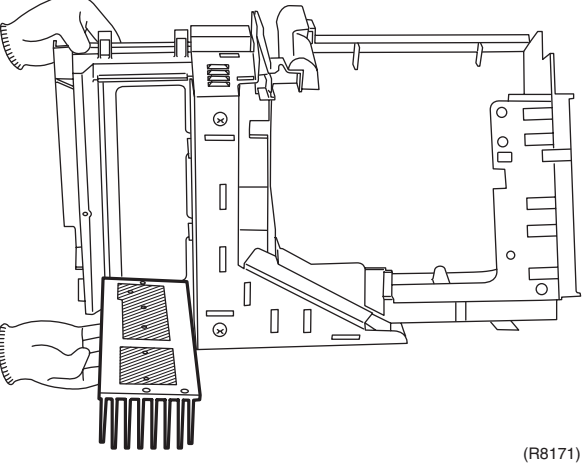
Be sure to wait 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Procedure	Points
1	Remove the screw and remove the electrical box cover.		<p><b>Preparation</b></p> <ul style="list-style-type: none"> <li>■ Remove the panels according to the “Removal of Outer Panels”.</li> <li>■ Remove the electrical box according to the “Removal of Electrical Box”.</li> </ul>
2	Detach the insulation sheet.		<ul style="list-style-type: none"> <li>■ The trimmed part goes front.</li> </ul>
3	Remove the 2 screws of the earth terminals.		

Step	Procedure	Points
4	Release the earth wire from the hook.	
	 <p style="text-align: right;">(R8159)</p>	
5	Remove the 2 screws and detach the 1 clip to remove the radiation shield plate.	
	 <p style="text-align: center;">Radiation shield plate</p> <p style="text-align: right;">(R12198)</p>	
	 <p style="text-align: right;">(R8161)</p>	
6	Cut off the 5 clamps and disconnect the wire harnesses.	
	 <p style="text-align: right;">(R8162)</p>	

Step	Procedure	Points
7	Remove the 8 screws in total to remove the PCB.	
	 <p>(R8163)</p>  <p>(R8164)</p>	
8	Lift up the back side slightly and unfasten the hooks of the front.	<ul style="list-style-type: none"> <li>When reassembling, make sure that the hooks of the electrical box are placed on the PCB.</li> </ul>
	 <p>Hooks</p> <p>(R8166)</p>	
9	Lift up the PCB.	
	 <p>(R8167)</p>	

Step	Procedure	Points
10	Remove the PCB.  <p>(R8168)</p>	
11	Detach the terminals from the terminal board.  <p>(R8169)</p>	<p>[S20] : electronic expansion valve coil                      [S40] : overload protector                      [S70] : fan motor                      [S80] : four way valve coil                      [S90] : thermistors</p>

Step	Procedure	Points
12	<p data-bbox="199 219 446 280">Remove the screw of the radiation fin.</p>  <p data-bbox="518 548 638 577">Radiation fin</p> <p data-bbox="1005 586 1077 609">(R12214)</p>  <p data-bbox="1013 1086 1077 1108">(R8171)</p>	

# 4. Removal of Partition Plate / Sound Blankets

**Procedure**

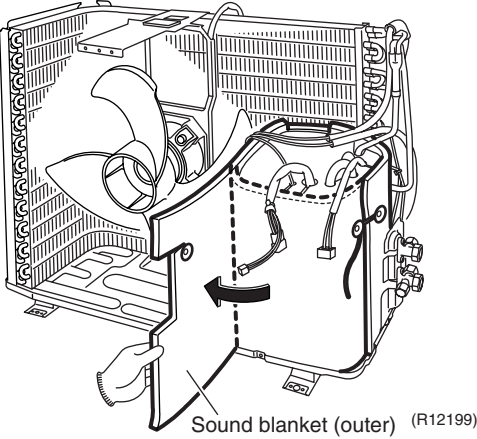
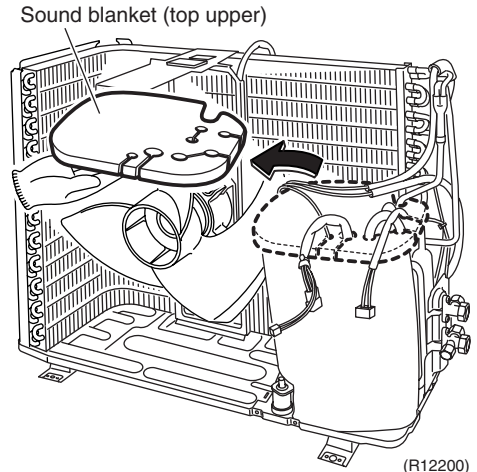
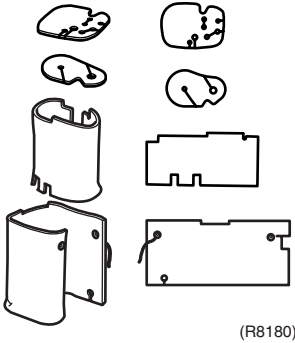
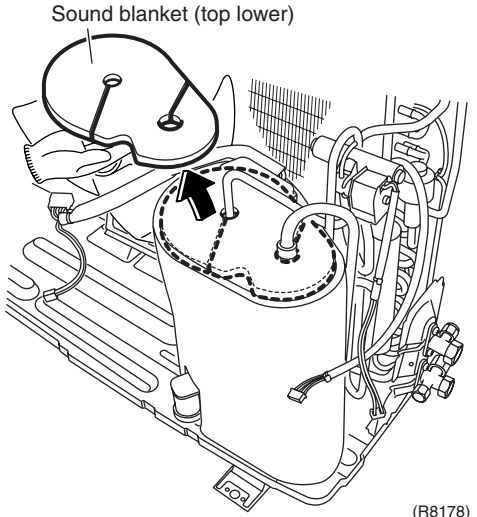
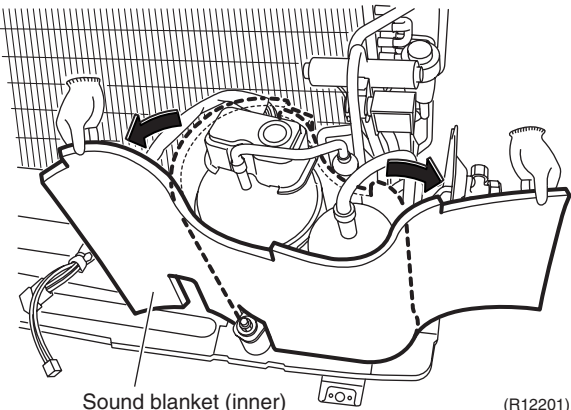


**Warning**

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Step	Procedure	Points
1. Remove the partition plate.	<p style="text-align: right;">(R12282)</p>	<ul style="list-style-type: none"> <li>■ When reassembling, fit the lower hooks into the bottom frame.</li> </ul>
1 Remove the 2 screws.	<p style="text-align: right;">(R14110)</p>	<p style="text-align: right;">(R14111)</p>
2 The partition plate has hooks on the lower side. Lift and pull the partition plate to remove.		
3 Remove the screw to remove the reactor.		



Step	Procedure	Points
2. Remove of the sound blanket.		
1 Untie the string, open the sound blanket (outer) and pull it out.	 <p>Sound blanket (outer) (R12199)</p>	<ul style="list-style-type: none"> <li>Since the piping ports are torn easily, remove the blanket carefully.</li> </ul>
2 Remove the sound blanket (top upper).	 <p>Sound blanket (top upper) (R12200)</p>	 <p>(R8180)</p>
3 Remove the sound blanket (top lower).	 <p>Sound blanket (top lower) (R8178)</p>	<ul style="list-style-type: none"> <li>The design of the sound blankets is different depending on the models.</li> </ul>
4 Open the sound blanket (inner) and pull it out.	 <p>Sound blanket (inner) (R12201)</p>	

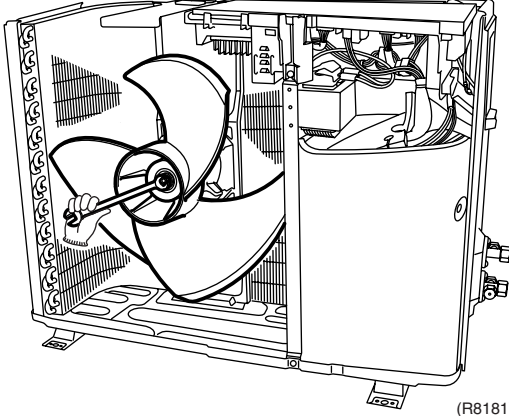
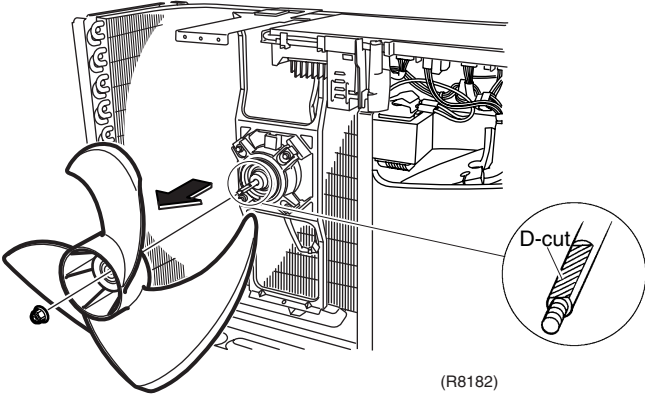
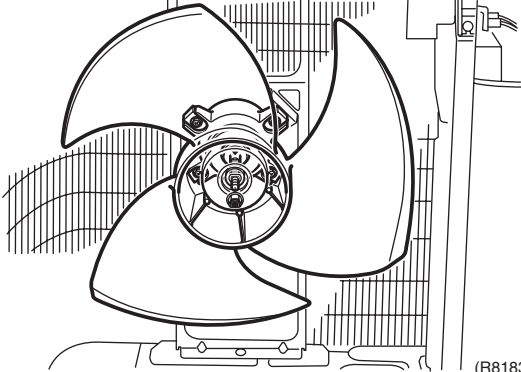
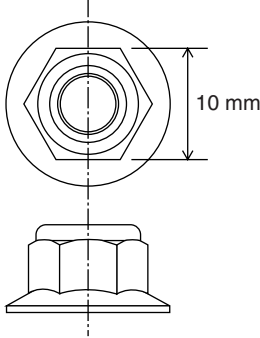
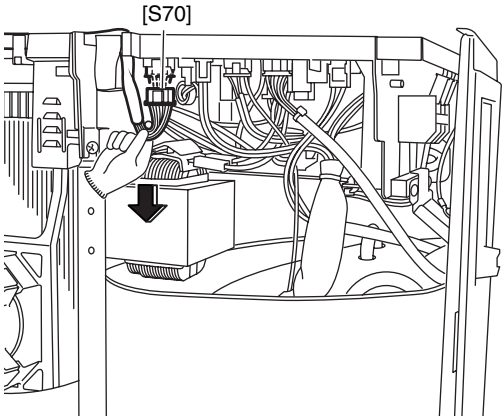
# 5. Removal of Outdoor Fan / Fan Motor

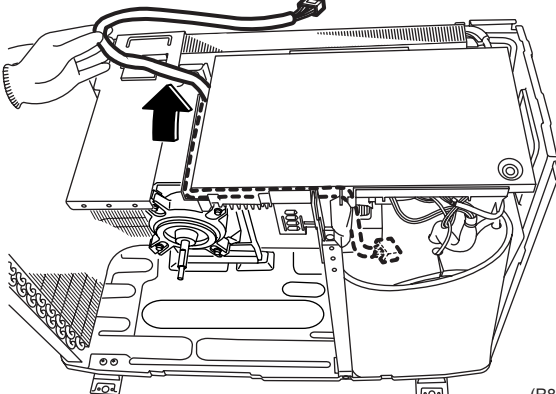
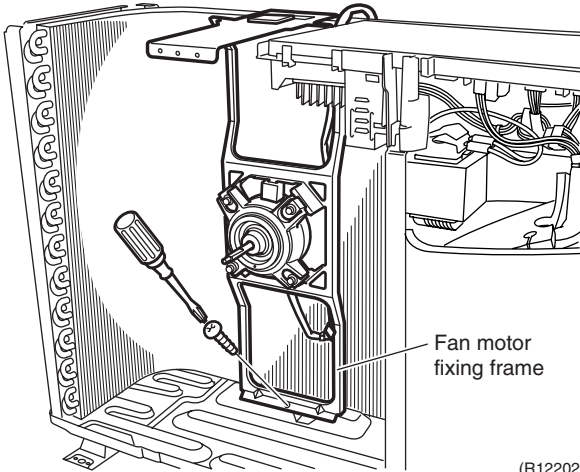
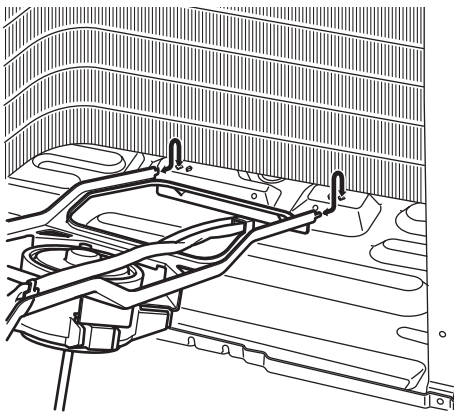
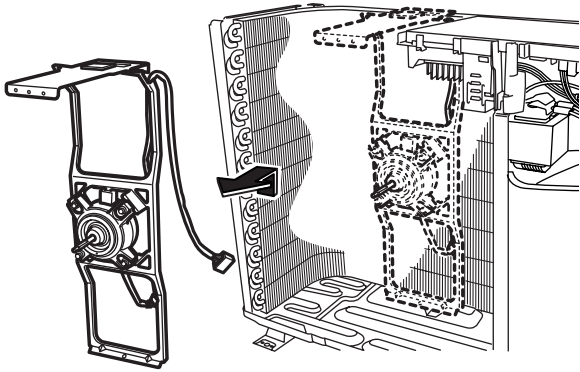
**Procedure**



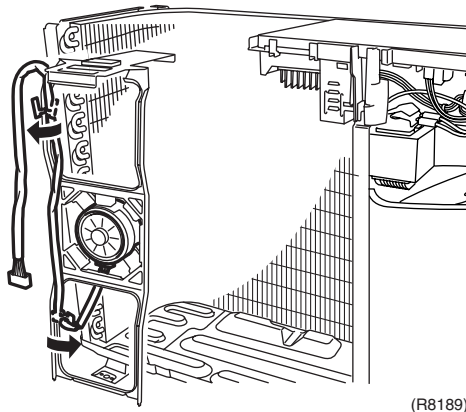
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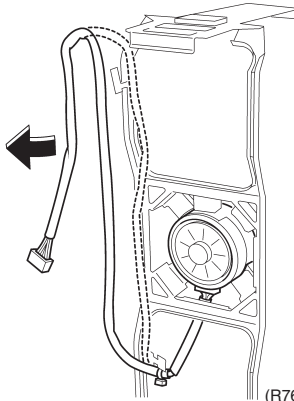
Step	Procedure	Points
<p>1. Remove the outdoor fan.</p> <p>1 Remove the washer fitted nut of the outdoor fan.</p> <p>2 Remove the outdoor fan.</p>	 <p>(R8181)</p>  <p>(R8182)</p>  <p>(R8183)</p>	<p>■ Nut size: M6</p>  <p>10 mm</p> <p>(R12236)</p> <p>■ When reassembling, align the ▼ mark of the outdoor fan with the D-cut section of the motor shaft.</p>
<p>2. Remove the fan motor.</p> <p>1 Disconnect the connector for the fan motor [S70].</p>	 <p>[S70]</p> <p>(R8184)</p>	

Step	Procedure	Points
2	<p>The figure shows the arrangement of the fan motor lead wire.</p>  <p>(R8185)</p>	
3	<p>Remove the 1 screw of the fan motor fixing frame.</p>  <p>Fan motor fixing frame</p> <p>(R12202)</p>  <p>(R8187)</p>	
4	<p>Remove the fan motor fixing frame.</p>  <p>(R8188)</p>	

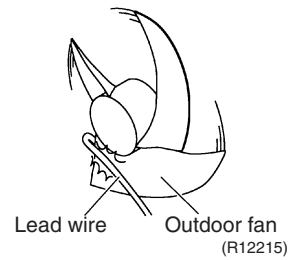
Step	Procedure	Points
5	Turn the fan motor fixing frame backward and open the 2 hooks of the fan motor lead wire.	
6	Release the fan motor lead wire.	<ul style="list-style-type: none"> <li>When reassembling, put the fan motor lead wire through the back of the fan motor (so as not to be entangled with the outdoor fan).</li> </ul>
7	Remove the 4 screws and 4 rubber vibration isolators to remove the fan motor.	



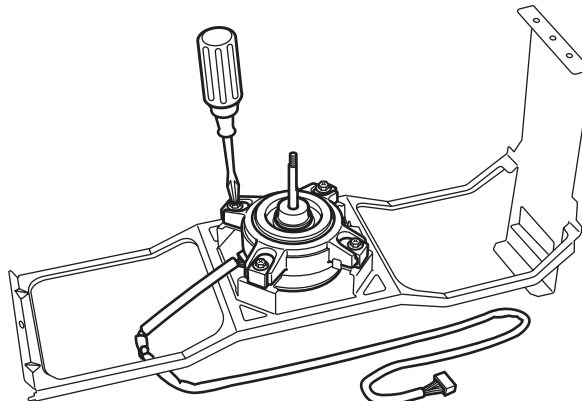
(R8189)



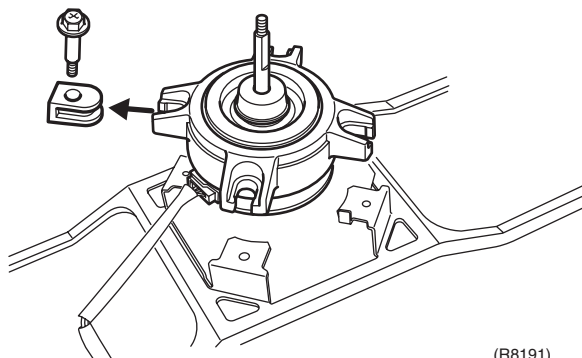
(R7627)



Lead wire Outdoor fan (R12215)



(R8190)



(R8191)

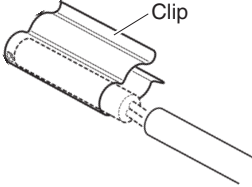
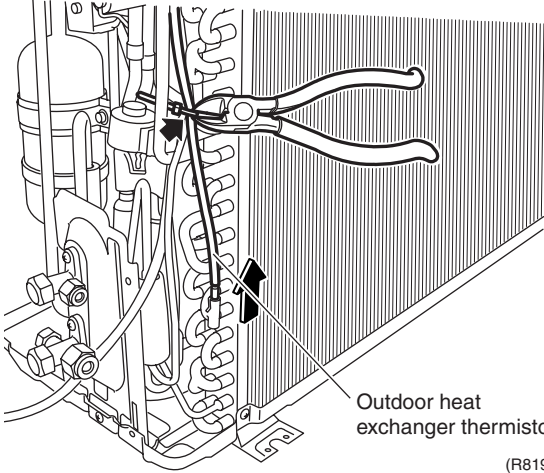
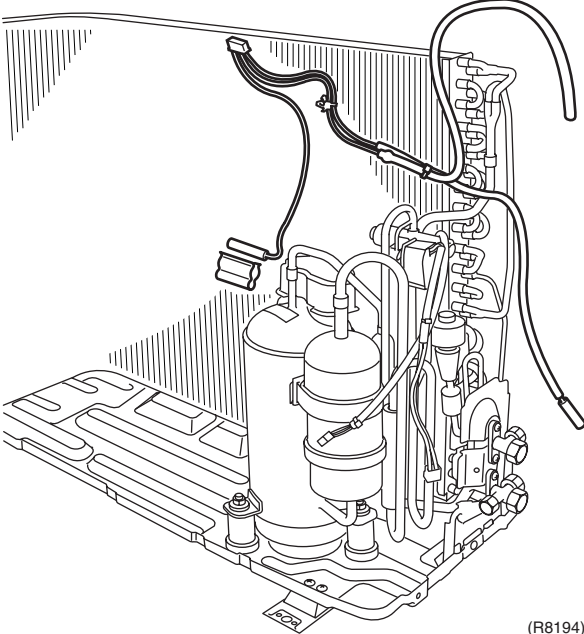
## 6. Removal of Thermistors

### Procedure



### Warning

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

Step	Procedure	Points
1	Release the discharge pipe thermistor.	<ul style="list-style-type: none"> <li>Be careful not to lose the clip for the thermistor.</li> </ul>  <p style="text-align: right;">(R12279)</p>
2	Cut the clamp and pull out the outdoor heat exchanger thermistor.	 <p style="text-align: right;">(R8193)</p>
3	The thermistors for outdoor temperature / discharge pipe / outdoor heat exchanger are united as one assembly.	 <p style="text-align: right;">(R8194)</p>
4	The figure shows the arrangement of the thermistors.	

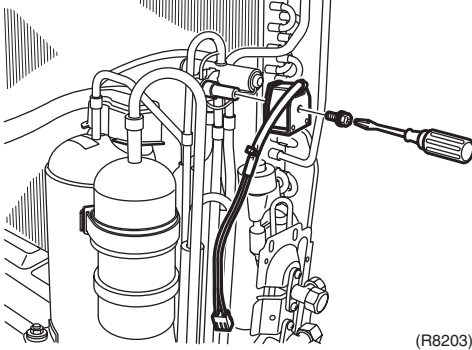
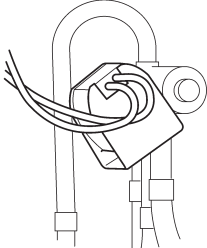
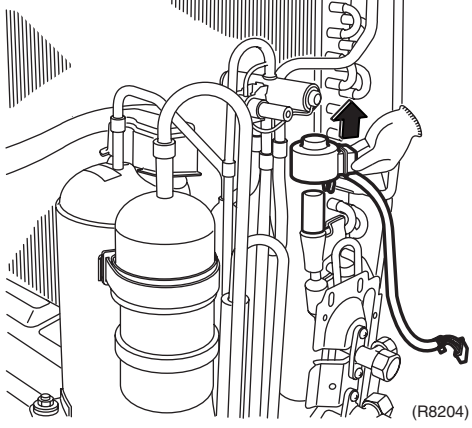
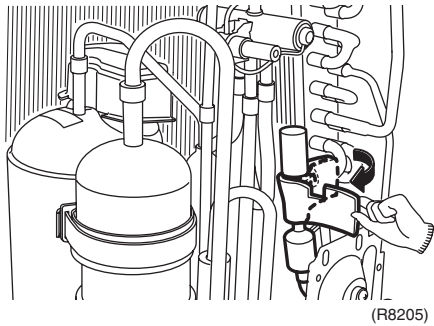
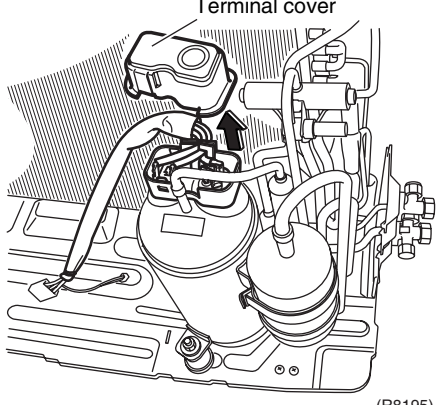
# 7. Removal of Four Way Valve / Electronic Expansion Valve

**Procedure**

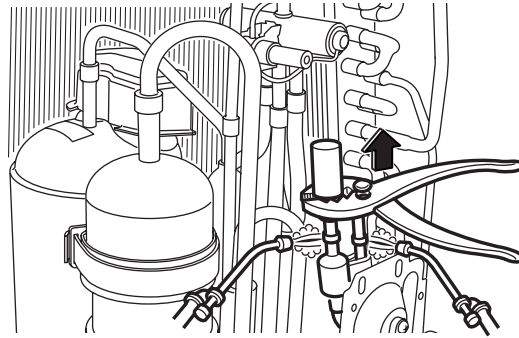


**Warning**

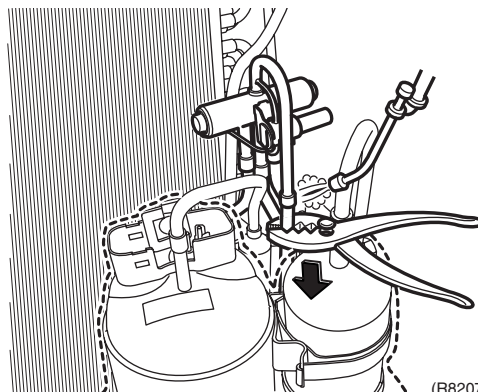
Be sure to wait 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1. Remove the peripheries.		<p><b>Preparation</b></p> <ul style="list-style-type: none"> <li>■ Remove the sound blanket.</li> </ul>
1 Remove the screw and remove the four way valve coil.	 <p>(R8203)</p>	 <p>(R7703)</p>
2 Pull out the electronic expansion valve coil.	 <p>(R8204)</p>	<ul style="list-style-type: none"> <li>■ The cooling only models do not have a four way valve coil.</li> <li>■ Detach the four way valve coil and the 2 clamps, and then detach the wire harnesses.</li> </ul>
3 Remove the putty.	 <p>(R8205)</p>	
4 Remove the terminal cover.	 <p>Terminal cover</p> <p>(R8195)</p>	

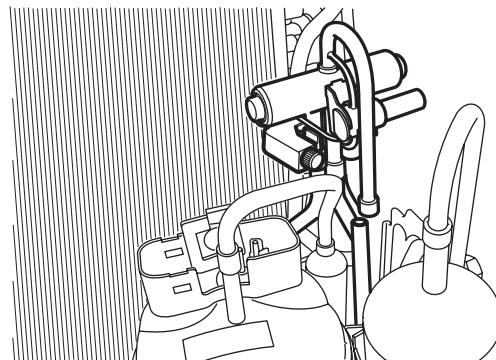
Step	Procedure	Points
<ul style="list-style-type: none"> <li>■ Before working, make sure that the refrigerant gas is empty in the circuit.</li> <li>■ Be sure to apply nitrogen replacement when heating up the brazed part.</li> </ul>		<p><b>Warning</b> Be careful not to get yourself burnt with the pipes and other parts that are heated by the gas brazing machine.</p>
2.	Remove the four way valve and electronic expansion valve.	<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>
1	Heat up the 2 brazed parts of the electronic expansion valve and remove it.	<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 parts of the four way valve.	<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>
3	Pull the pipe with pliers and disconnect.	<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>



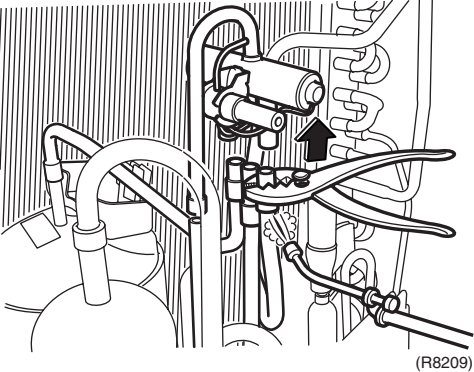
(R8206)



(R8207)



(R8208)

Step	Procedure	Points
	 <p>(R8209)</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>



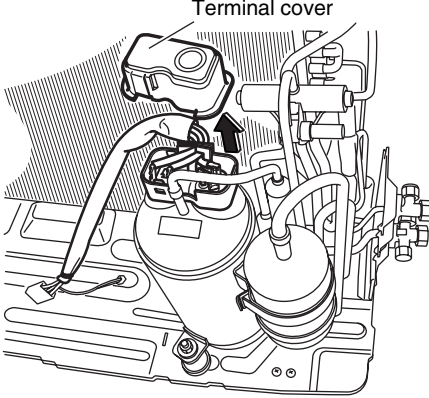
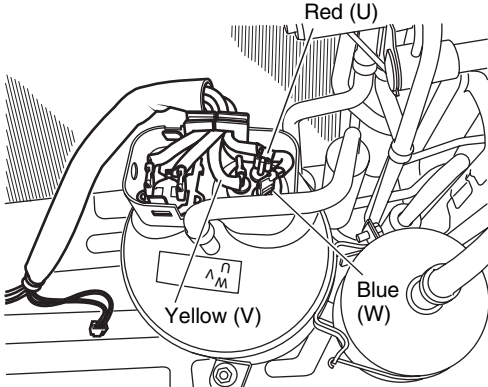
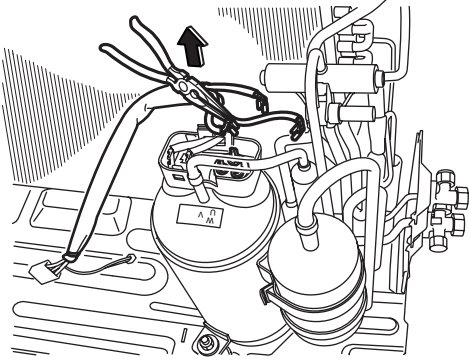
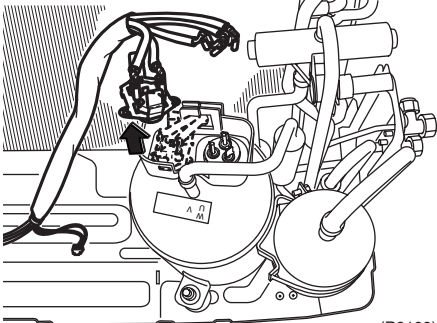
## 8. Removal of Compressor

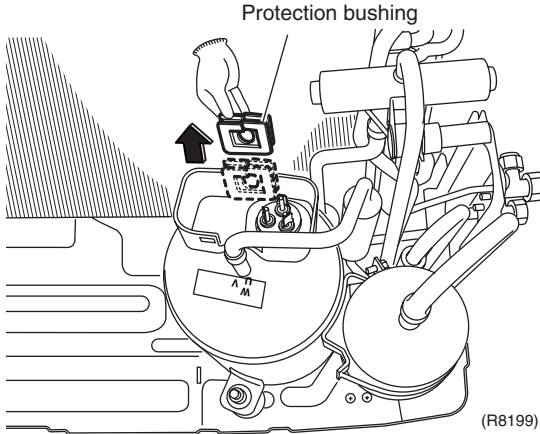
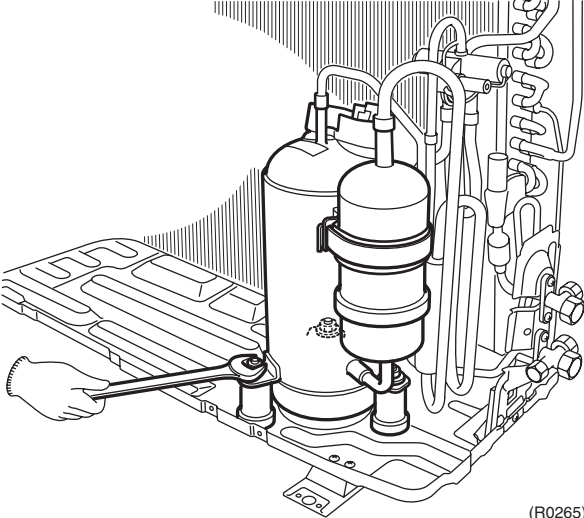
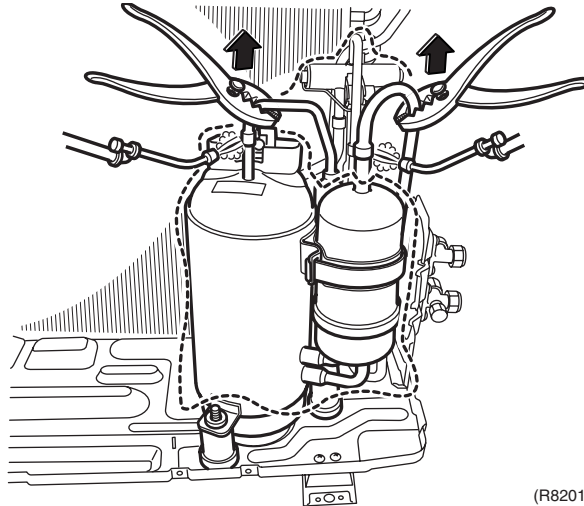
### Procedure

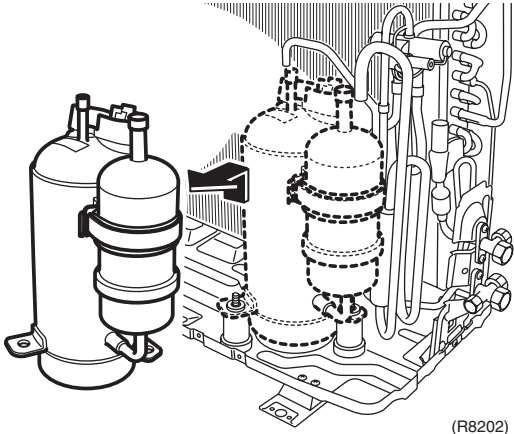


### Warning

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

Step	Procedure	Procedure	Points
1	Remove the terminal cover.	 <p style="text-align: center;">Terminal cover</p> <p style="text-align: right;">(R8195)</p>	
2	Disconnect the lead wires of the compressor.	 <p style="text-align: center;">Red (U)</p> <p style="text-align: center;">Yellow (V)      Blue (W)</p> <p style="text-align: right;">(R8196)</p>  <p style="text-align: right;">(R8197)</p>	
3	Unfasten the hooks with a flat screwdriver to remove the overload protector.	 <p style="text-align: right;">(R8198)</p>	

Step	Procedure	Points
4	<p>Remove the protection bushing.</p>  <p style="text-align: right;">(R8199)</p>	
5	<p>Remove the 2 nuts of the compressor.</p>  <p style="text-align: right;">(R0265)</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>
6	<p>Heat up the brazed part of the discharge side and disconnect.</p> <p>7 Heat up the brazed part of the suction side and disconnect.</p>  <p style="text-align: right;">(R8201)</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> <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>

Step	Procedure	Points
8	<p>Lift the compressor up to remove.</p>  <p>(R8202)</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> <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> <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> <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
06 / 2013	Si00-873	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.

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