



Si001560EB

# REMOVAL PROCEDURE



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

## 1.5/2.0/2.5/3.0/3.5 kW Class 9000/12000 Btu/h Class

-  Outdoor Unit
-  Inverter
-  Pair Type



# Service Manual

# Removal Procedure

## Outdoor Unit

### ●Cooling Only

ARKC09RV2S  
ARKC12RV2S

RKC09PV2S  
RKC12PV2S

RKC09QV2S  
RKC12QV2S

RKC15PVM  
RKC20PVM  
RKC25PVM  
RKC35PVM

RKC25QVM  
RKC35QVM

RKC15PVM4  
RKC20PVM4  
RKC25PVM4  
RKC35PVM4

RKC25QVM4  
RKC35QVM4

RKC25PVMM  
RKC35PVMM

RKC20PVMV  
RKC25PVMV  
RKC35PVMV

RKC25QVMV  
RKC35QVMV

### ●Heat Pump

RXM20HVMV  
RXM25HVMV  
RXM35HVMV

RXP20HVLV  
RXP25HVLV  
RXP30HVLV

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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

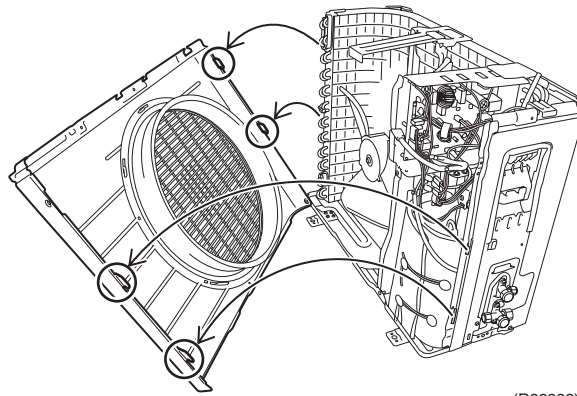


**Warning**

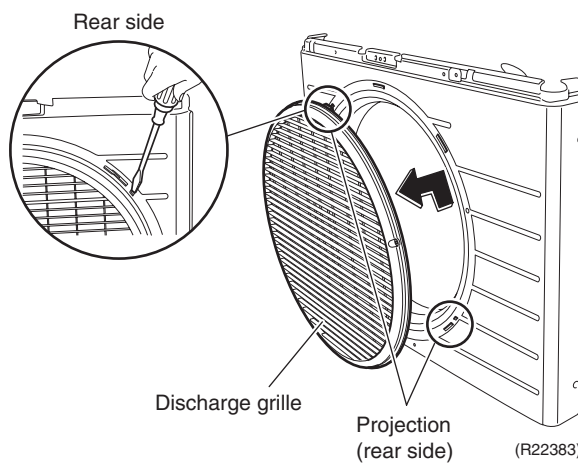
◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1	Remove the screw of the stop valve cover.	<p>■ When reassembling, make sure to fit the 3 hooks.</p>
2	Pull down and remove the stop valve cover.	
3	Remove the 3 screws, and then the top panel.	
4	Remove the 6 screws of the front panel.	

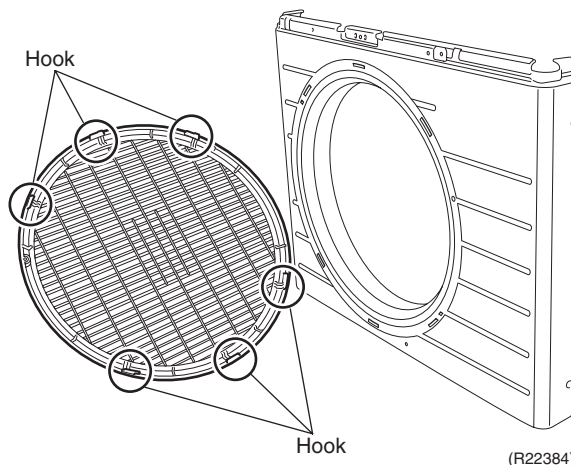
Step	Procedure	Points
5	Lift up the right side of the front panel and unfasten the 2 hooks.	
6	Unfasten the 2 left side hooks and remove the front panel.	
7	Press the 2 projections from the rear side and rotate the discharge grille.	
8	Unfasten the 6 hooks and remove the discharge grille.	



(R22382)



(R22383)



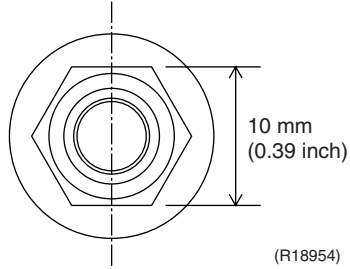
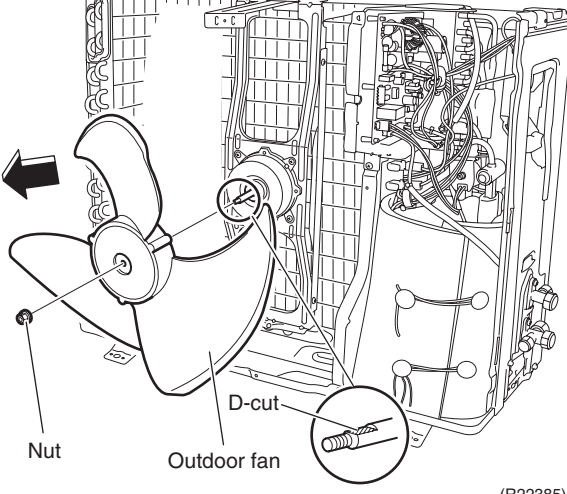
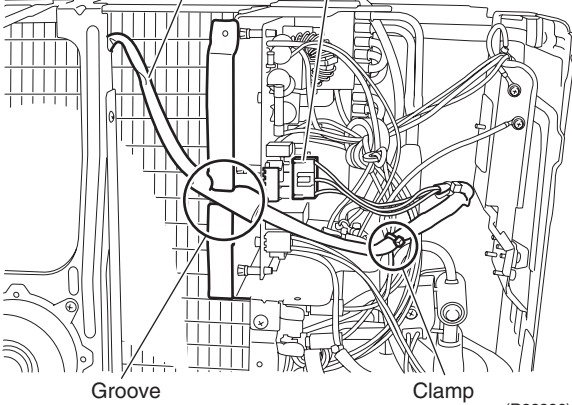
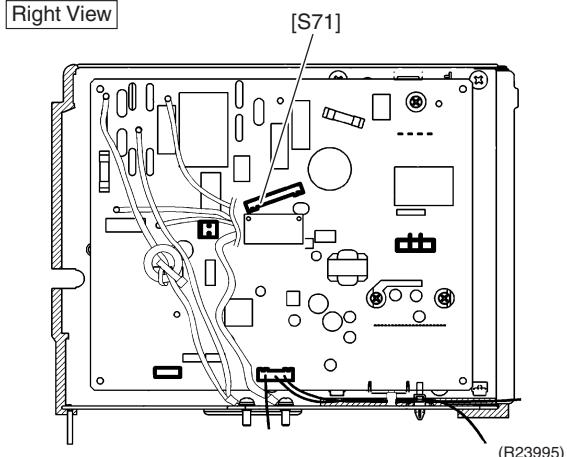
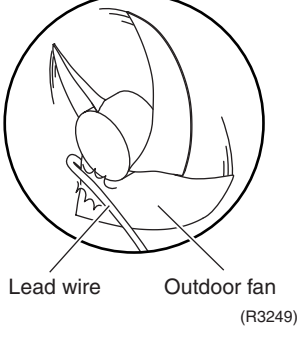
(R22384)

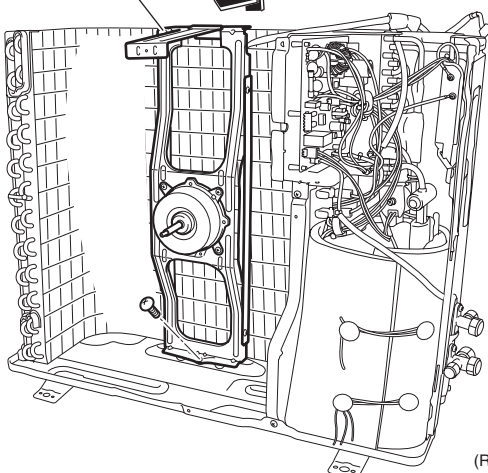
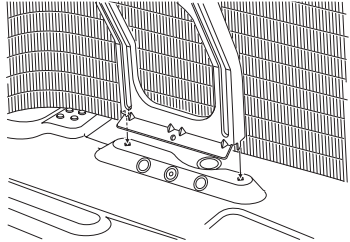
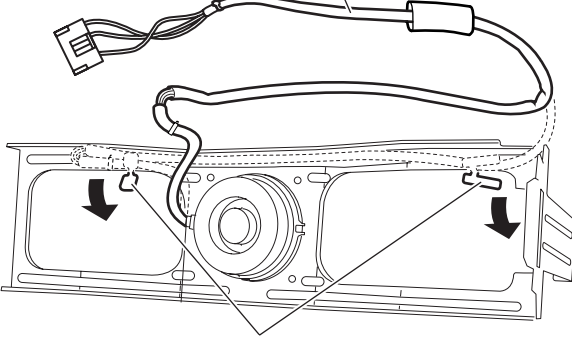
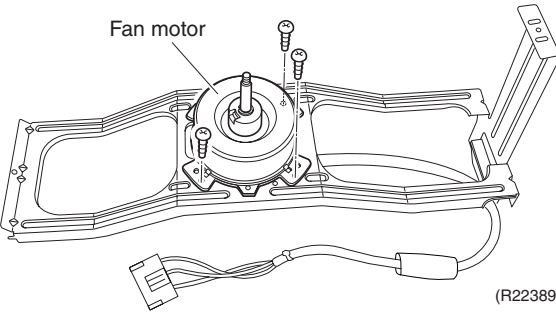
## 2. Outdoor Fan / Fan Motor



**Warning**

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

Step	Procedure	Points
1	Remove the nut, and then 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> 
2	Disconnect the connector [S70] or [S71] depending on the model.	<p>[S70]/[S71]: fan motor</p> <p>■ The location of the connectors [S70] and [S71] is different.</p> 
3	Cut the clamp and release the fan motor lead wire from the groove.	<p>■ In case of [S71] models</p> <p>Right View</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> 

Step	Procedure	Procedure	Points
4	Remove the screw, and then the fan motor fixing frame.	<p data-bbox="518 219 742 248">Fan motor fixing frame</p>  <p data-bbox="997 705 1061 734">(R22387)</p>	<p data-bbox="1093 219 1458 309">■ When reassembling, fit the 2 lower hooks into the bottom frame.</p>  <p data-bbox="1372 577 1444 607">(R10460)</p>
5	Unfasten the 2 hooks on the fan motor fixing frame and release the fan motor lead wire.	<p data-bbox="774 779 965 808">Fan motor lead wire</p>  <p data-bbox="718 1153 774 1182">Hook</p> <p data-bbox="997 1176 1061 1205">(R22388)</p>	
6	Remove the 3 screws, and then the fan motor.	<p data-bbox="614 1265 710 1294">Fan motor</p>  <p data-bbox="997 1534 1061 1563">(R22389)</p>	

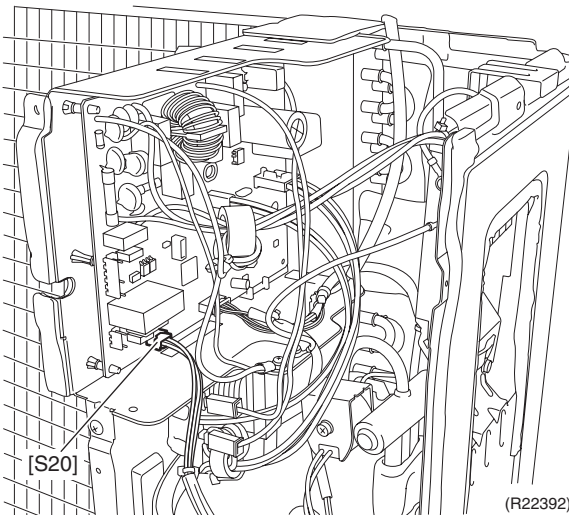
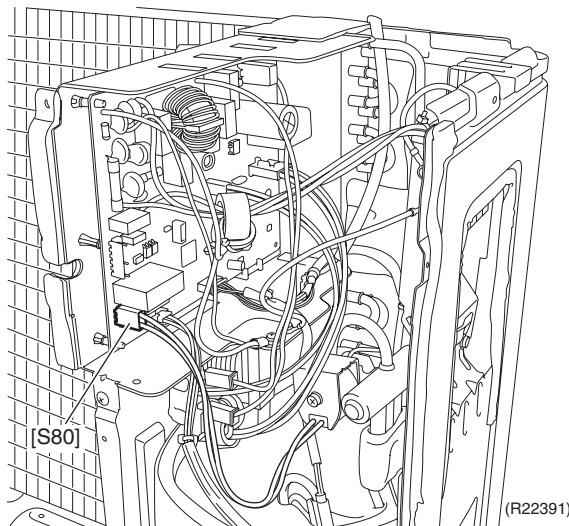
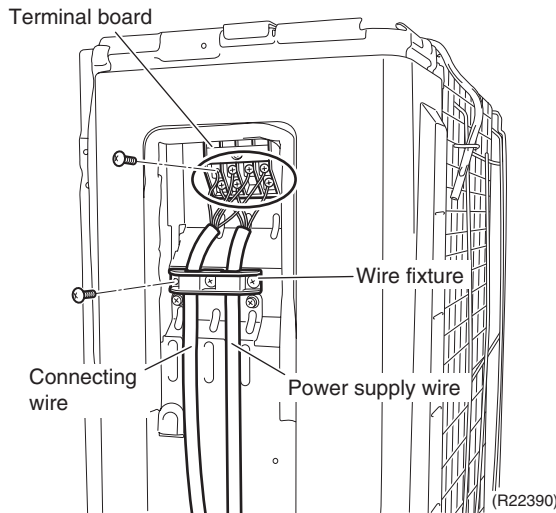
### 3. Electrical Box



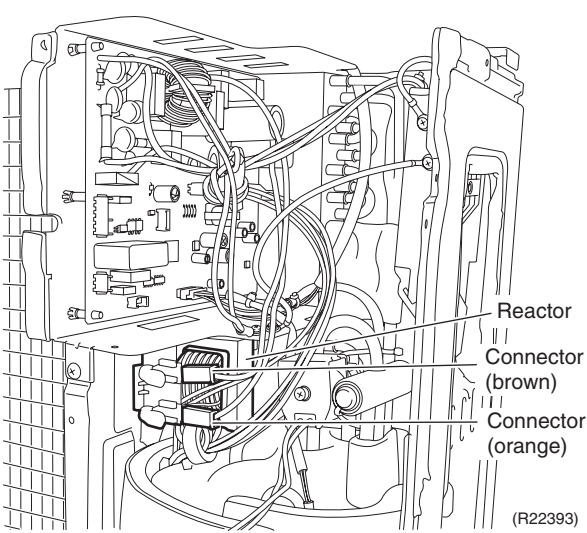
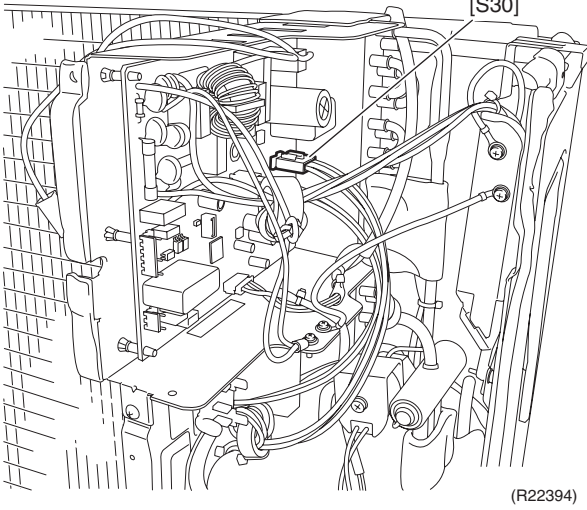
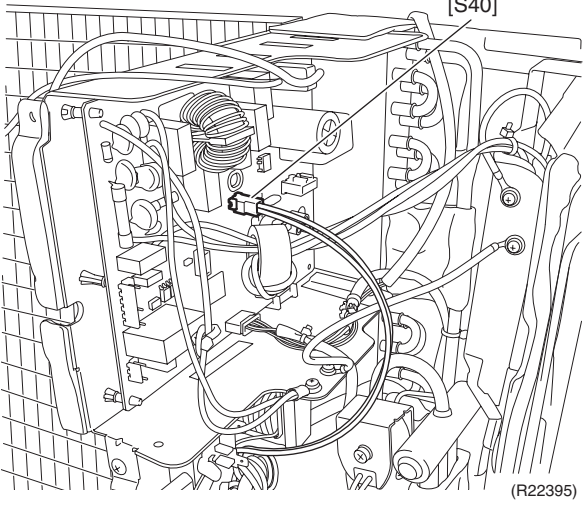
**Warning**

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

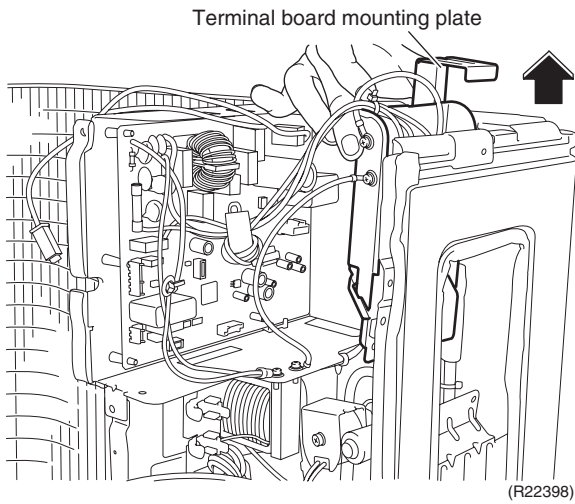
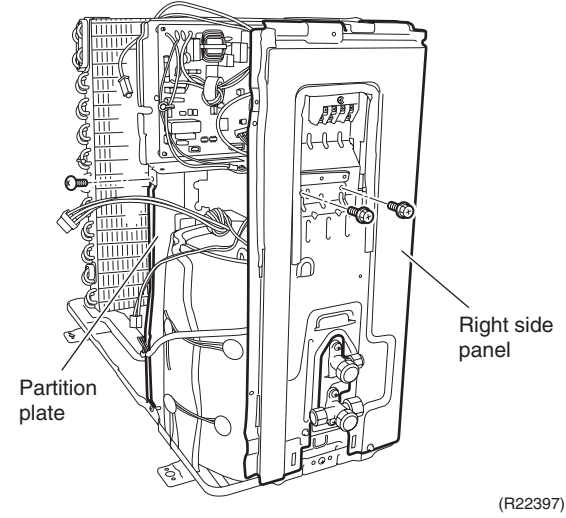
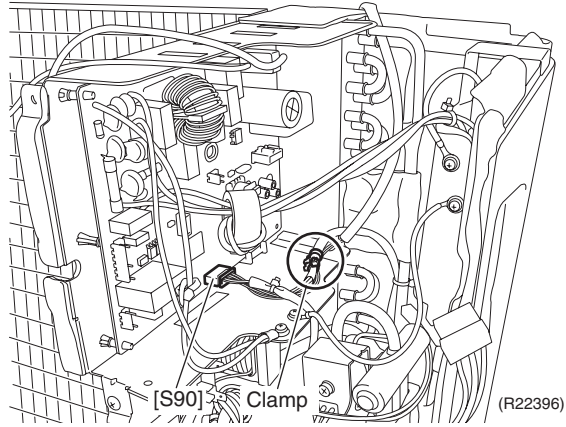
Step	Procedure	Points
1	Remove the 7 screws on the terminal board and disconnect the connecting wire and power supply wire.	
2	Remove the 3 screws, and then the wire fixture.	
3	Disconnect the connector [S80].	<p>[S80]: four way valve coil</p> <p>■ The cooling only models have no harness for [S80].</p>
4	Disconnect the connector [S20].	<p>[S20]: electronic expansion valve coil</p>

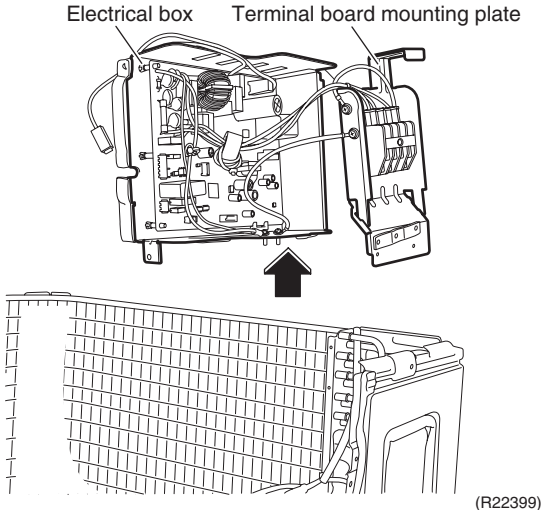
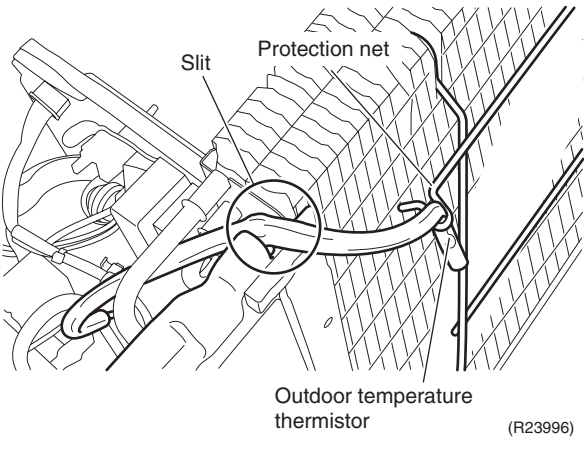
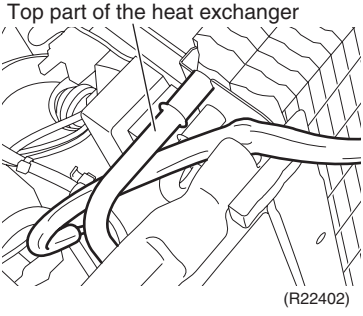
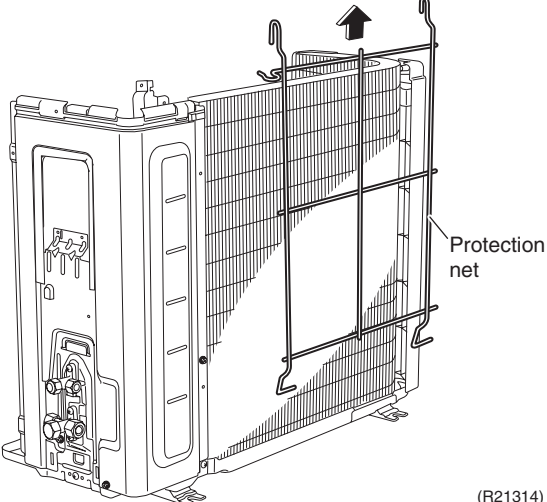


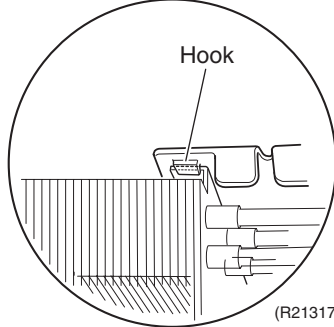


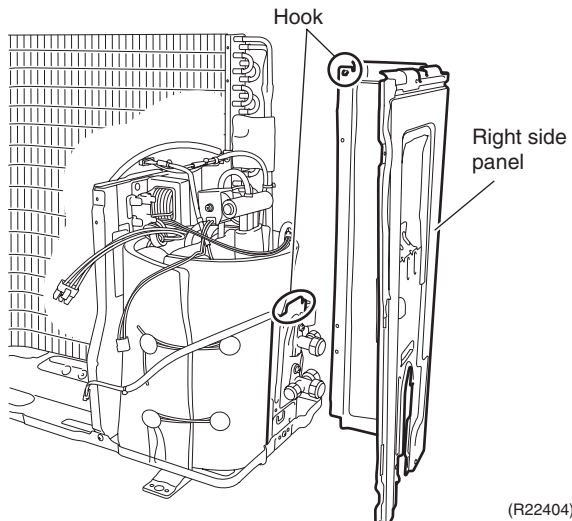
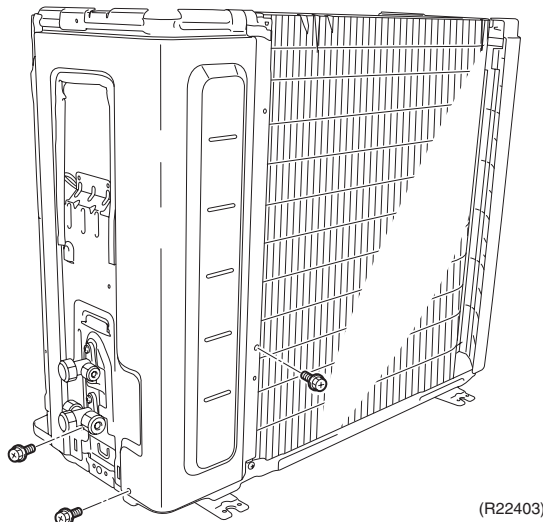
Step	Procedure	Points
5	Disconnect the 2 connectors from the reactor.	
		
6	Disconnect the connector [S30].	[S30]: compressor
		
7	Disconnect the connector [S40].	[S40]: overload protector
		

Step	Procedure	Points
8	Disconnect the connector [S90] and remove the clamp.	[S90]: thermistors
9	Remove the 2 screws on the right side panel, and then the screw on the partition plate.	
10	Lift up the terminal board mounting plate from the right side panel.	

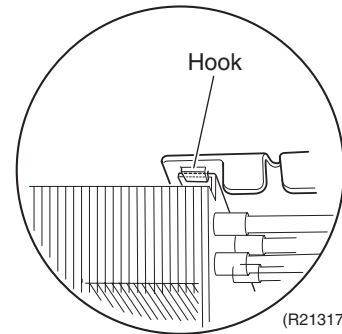


Step	Procedure	Points
11	Lift up and remove the electrical box together with the terminal board mounting plate.	<p>■ When reassembling, make sure to fit the rear hook.</p> 
12	Remove the outdoor temperature thermistor from the protection net and from the slit.	<p>■ When reassembling, make sure to pass the outdoor temperature thermistor under the top part of the heat exchanger first.</p>  
13	Lift up and remove the protection net.	

Step	Procedure	Points
14	Remove the 3 screws.	
15	Unfasten the 2 hooks and remove the right side panel.	<p>■ When reassembling, make sure to fit the rear hook.</p> 



■ When reassembling, make sure to fit the rear hook.

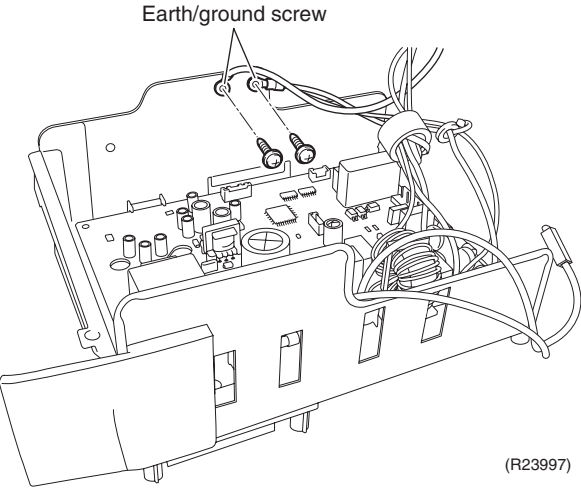
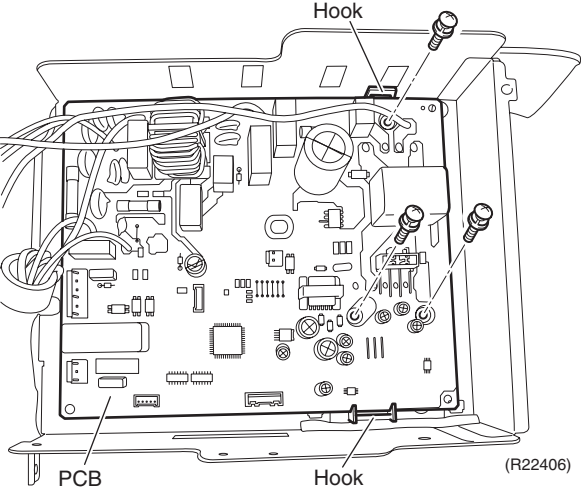
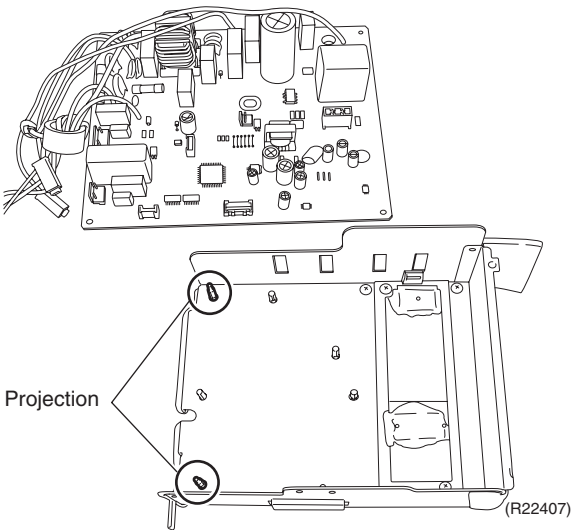


## 4. PCB



### Warning

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

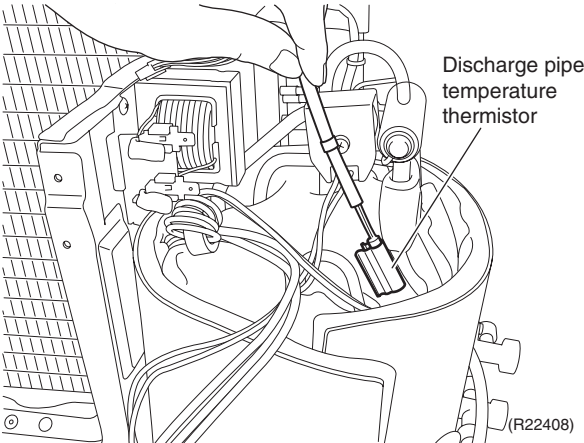
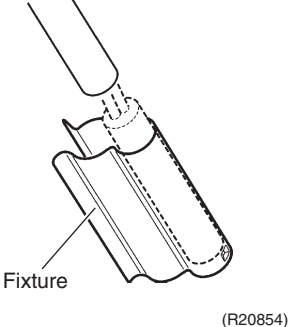
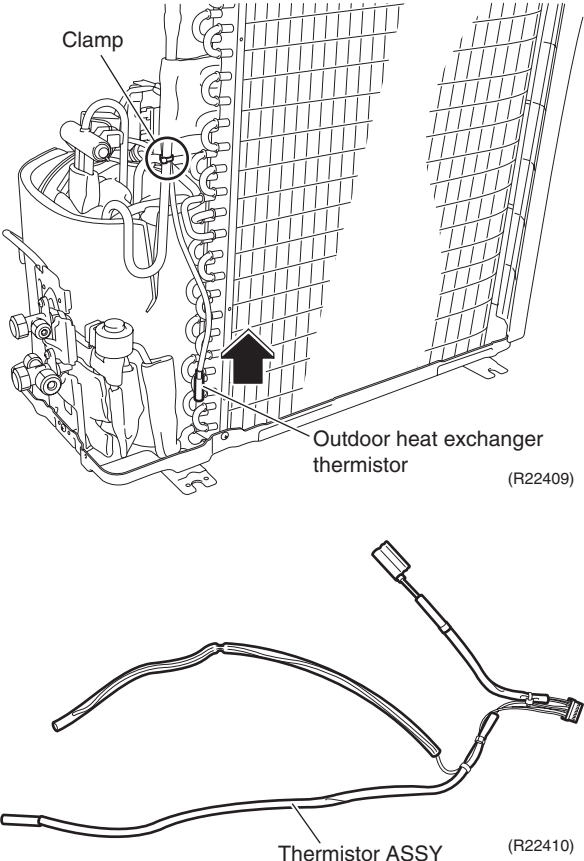
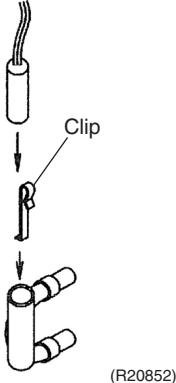
Step	Procedure	Points
1	Remove the 2 earth/ground screws.	<ul style="list-style-type: none"> <li>■ Some models do not have a ferrite core on the earth/ground harness.</li> </ul>
2	Remove the 3 screws of the PCB.	
3	Unfasten the 2 hooks and remove the PCB.	
	 <p style="text-align: right;">(R23997)</p>	
	 <p style="text-align: right;">(R22406)</p>	
	 <p style="text-align: right;">(R22407)</p>	<ul style="list-style-type: none"> <li>■ When reassembling, make sure to fit the 2 projections to the PCB.</li> </ul>

# 5. Thermistor ASSY



**Warning**

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

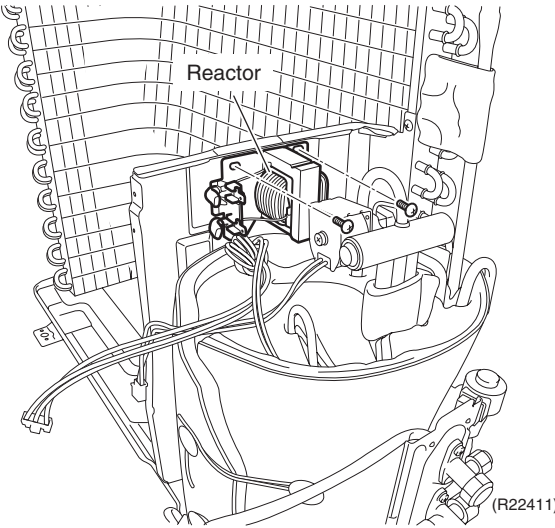
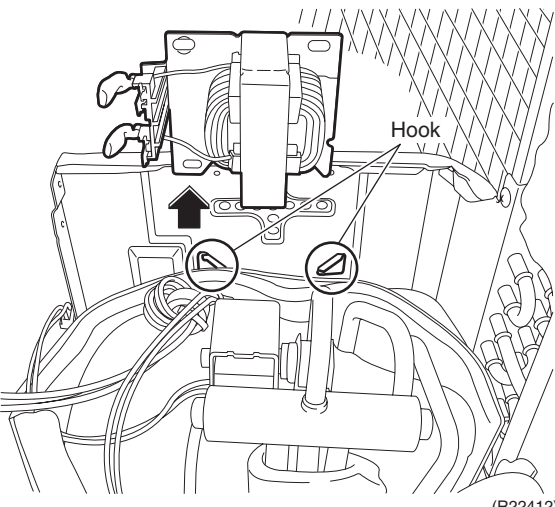
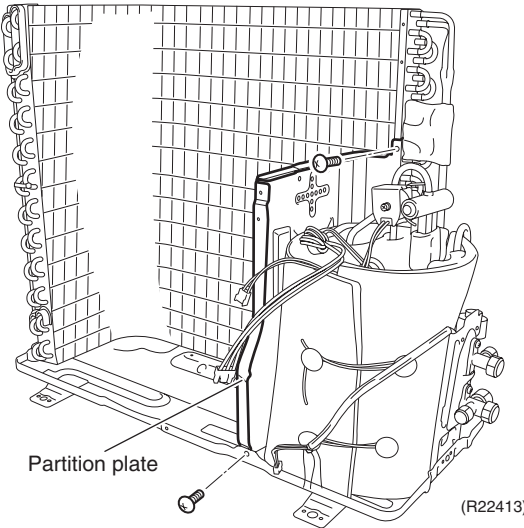
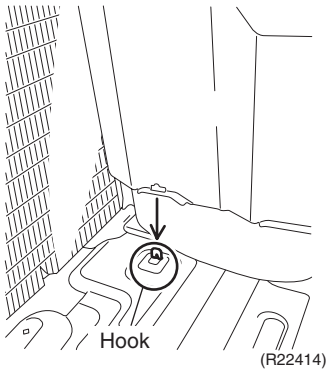
Step	Procedure	Points	
1	Pull out the discharge pipe temperature thermistor.		<ul style="list-style-type: none"> <li>■ Be careful not to lose the fixture for the thermistor.</li> </ul> 
2	Cut the clamp.		
3	Pull out the outdoor heat exchanger thermistor and remove the thermistor ASSY.		<ul style="list-style-type: none"> <li>■ Some models have sound blanket (back). Remove the sound blanket (back) beforehand.</li> <li>■ Be careful not to lose the clip for the thermistor.</li> </ul> 

## 6. 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 2 screws of the reactor.	
2	Slide the reactor upward to unfasten the 2 hooks.	
3	Remove the reactor.	
4	Remove the 2 screws, and then the partition plate.	<p data-bbox="1094 1491 1453 1615">■ When reassembling, fit the hole on the partition plate to the hook on the bottom frame.</p>  

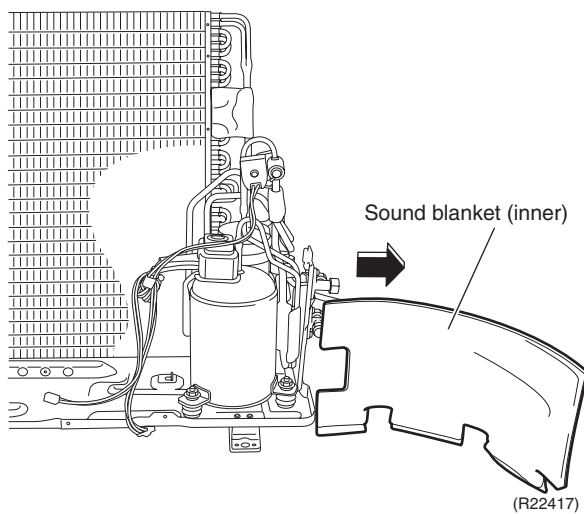
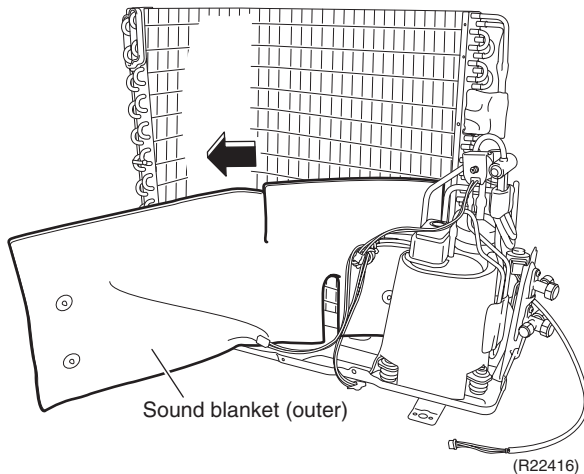
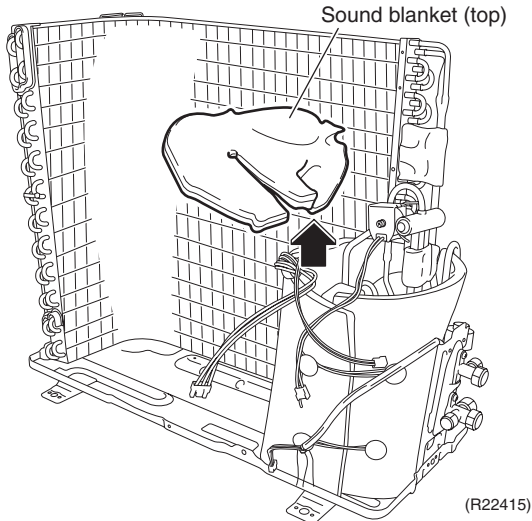
# 7. Sound Blankets



**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> <li>■ Some models have 2 sound blankets (top).</li> <li>■ Some models have sound blanket (back). Remove the sound blanket (back) beforehand.</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 / 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.)



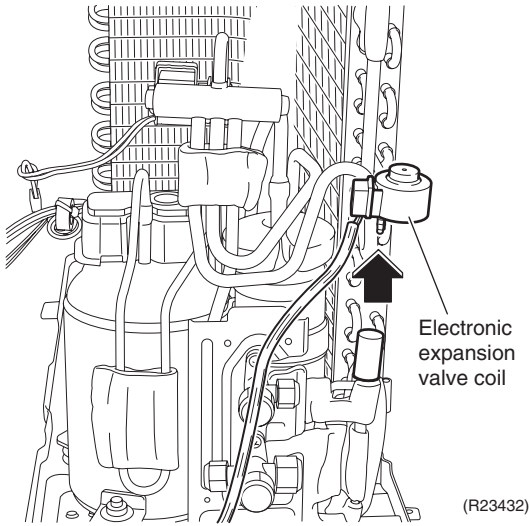
### Caution

- ◆ 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.

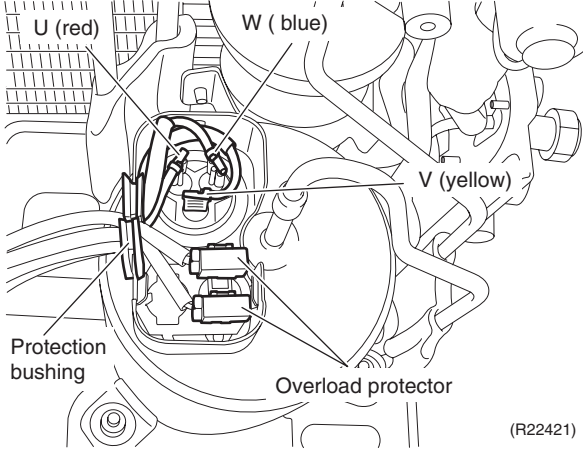
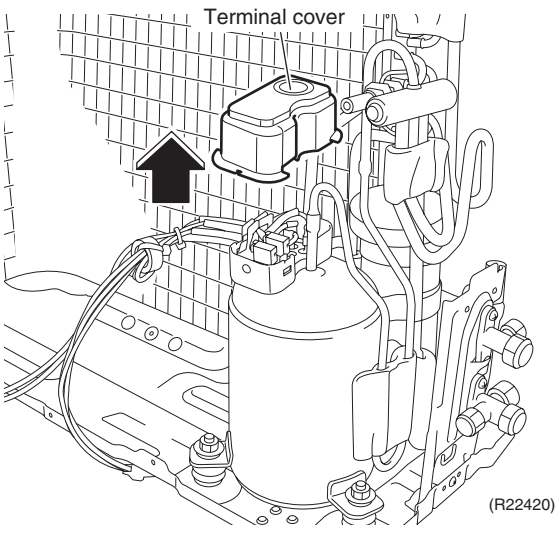
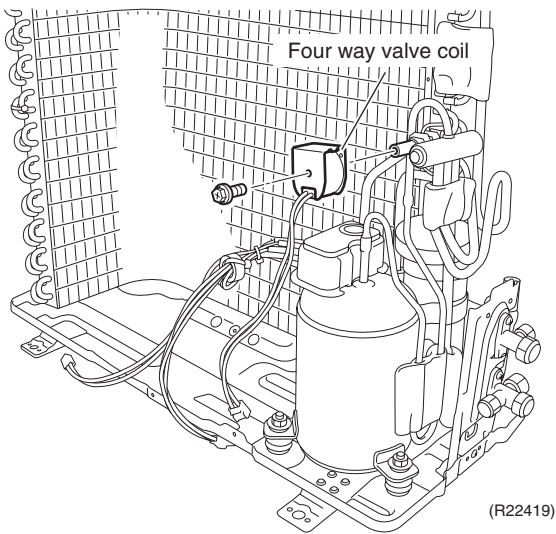


### Note

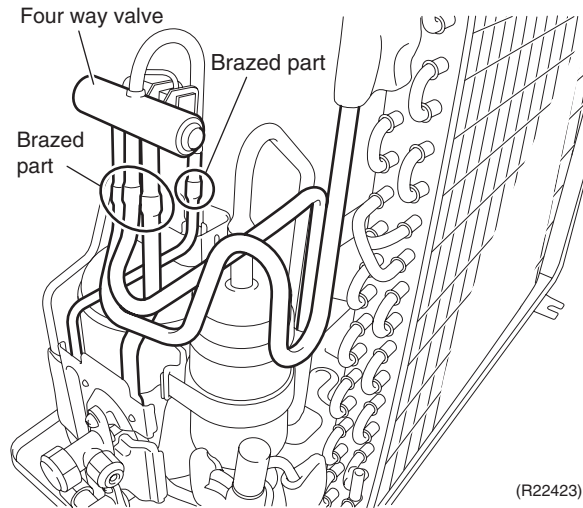
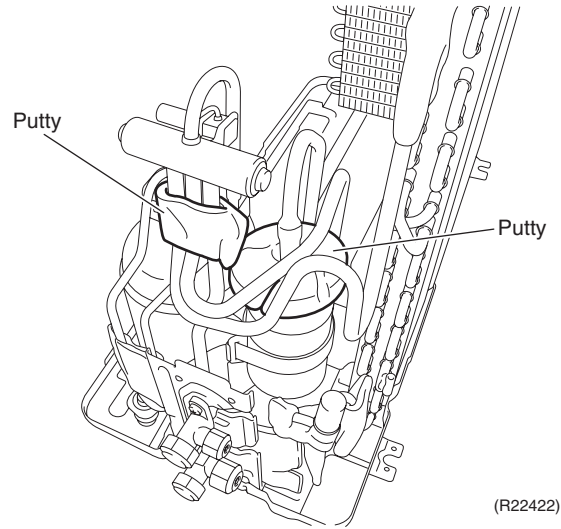
- ◆ Before working, make sure that the refrigerant gas is empty in the circuit.
- ◆ Be sure to apply nitrogen replacement when heating up the brazed part.
- ◆ Do not use a metal saw for cutting pipes by all means because the sawdust comes into the circuit.
- ◆ When withdrawing the pipes, be careful not 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.	

Step	Procedure	Points
2	Remove the screw, and then the four way valve coil.	<ul style="list-style-type: none"> <li>■ The cooling only models have no four way valve.</li> </ul>
3	Remove the terminal cover.	
4	Remove the protection bushing.	
5	Disconnect the compressor lead wires and the overload protector.	



Step	Procedure	Points
6	Remove the putties.	<ul style="list-style-type: none"> <li>■ The position of the putties varies depending on the model.</li> </ul>
7	Heat up the 4 brazed parts and remove the four way valve.	



## 9. Compressor



### Warning

- ◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.
- ◆ Be careful not to get yourself burnt with the pipes and other parts that are heated by the gas brazing machine.
- ◆ If the refrigerant gas leaks during work, ventilate the room. (If the refrigerant gas is exposed to flames, toxic gas may be generated.)
- ◆ Since it may happen that the refrigerant oil in the compressor catches fire, prepare wet cloth so as to extinguish fire immediately.



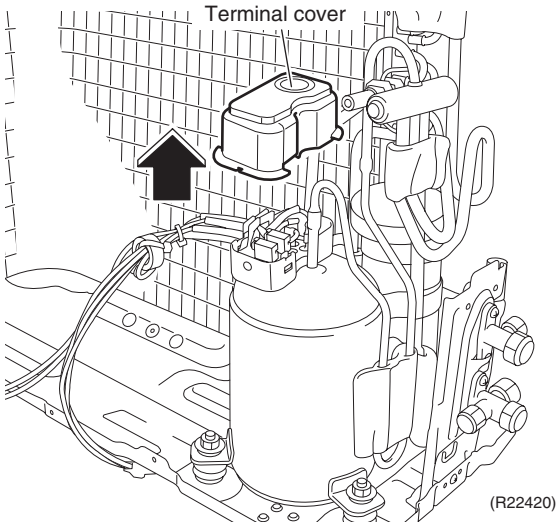
### Caution

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

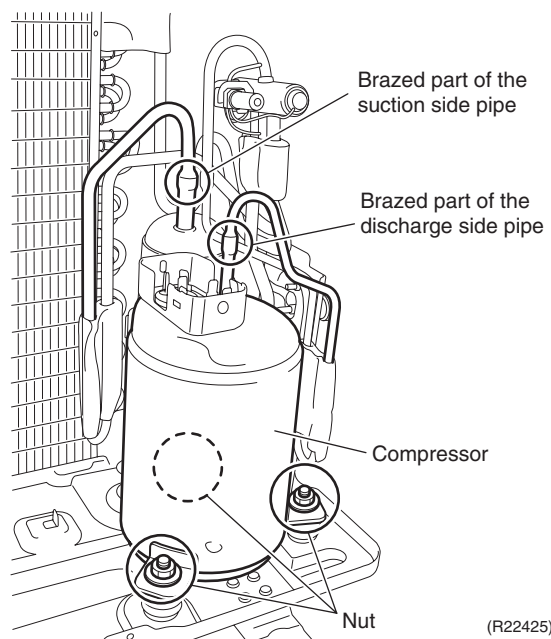
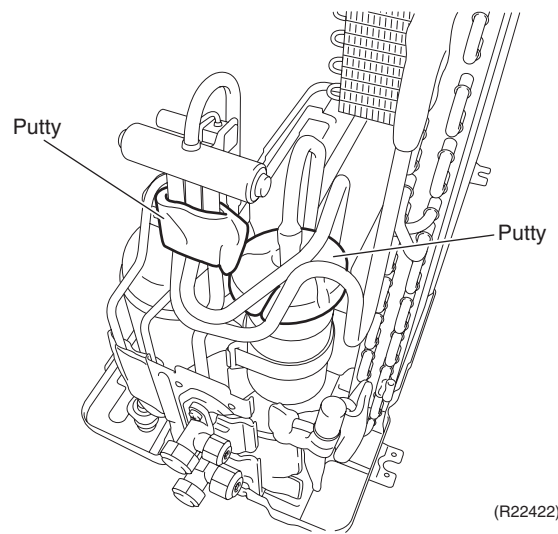
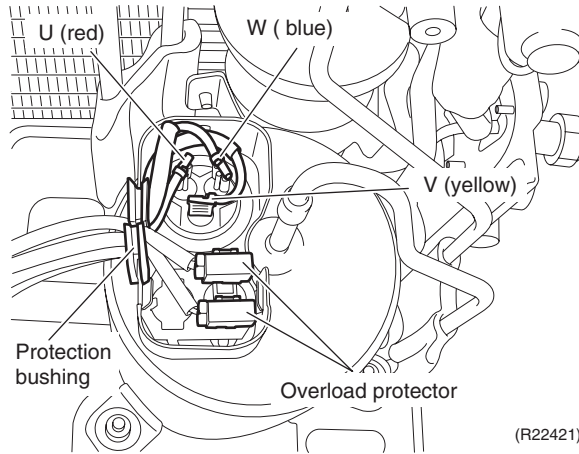


### Note

- ◆ Before working, make sure that the refrigerant gas is empty in the circuit.
- ◆ Be sure to apply nitrogen replacement when heating up the brazed part.
- ◆ Do not use a metal saw for cutting pipes by all means because the sawdust comes into the circuit.
- ◆ When withdrawing the pipes, be careful not to pinch them firmly with pliers. The pipes may get deformed.
- ◆ Provide a protective sheet or a steel plate so that the brazing flame cannot influence peripheries.
- ◆ Be careful so as not to burn the compressor terminals, the name plate, the outdoor heat exchanger fin.
- ◆ In case of difficulty with gas brazing machine.
  1. Disconnect the brazed part where is easy to disconnect and restore.
  2. Cut pipes on the main unit with a tube cutter in order to make it easy to disconnect.

Step	Procedure	Points
1	Remove the terminal cover. 	

Step	Procedure	Points
2	Remove the protection bushing.	
3	Disconnect the compressor lead wires and the overload protector.	
4	Remove the putties.	<p>■ The position of the putties varies depending on the model.</p>
5	Heat up the brazed part of the discharge side pipe and disconnect it.	
6	Heat up the brazed part of the suction side pipe and disconnect it.	
7	Remove the 3 nuts.	
8	Lift up the compressor and remove it.	



# Revision History

Month / Year	Version	Revised contents
09 / 2015	Si001560E	First edition
04 / 2016	Si001560EA	Model addition: ARKC09/12RV2S
09 / 2016	Si001560EB	Model addition: RKC09/12QV2S, RKC25/35QVM, RKC25/35QVM4, RKC25/35QVMV

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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