


# REMOVAL PROCEDURE



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

### 6.0/7.0/7.1/8.0/8.5/9.0 kW Class 33000 Btu/h Class

-  Outdoor Unit
-  Inverter
-  Pair Type



# **Service Manual Removal Procedure**

## **Outdoor Unit**

### **●Cooling Only**

**RKM33NV2S**

**RKS33JV2S**

**RKS85HVM**

**RKS85JVMG**

**RKS70MVLT**

**RKS80MVLT**

**RKS90MVLT**

### **●Heat Pump**

**RXM71NVLT**

**RXM80NVLT**

**RXM90NVLT**

**RXS60KBVMA**

**RXS70MVLT**

**RXS80MVLT**

**RXS90MVLT**

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**Note:**

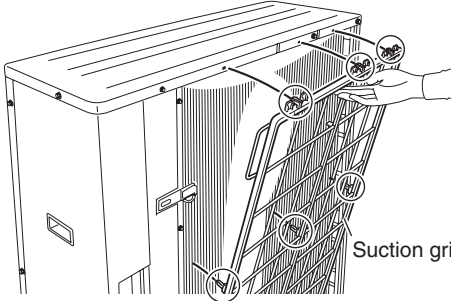
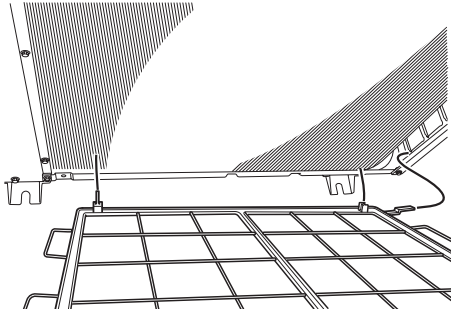
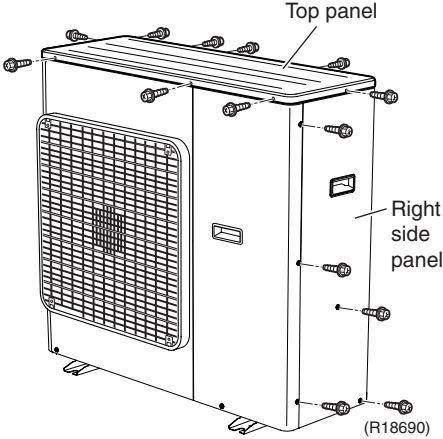
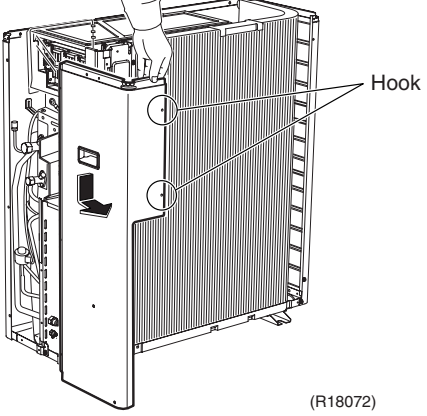
- The illustrations may be slightly different depending on the model.
- The illustrations are for heat pump models as representative.

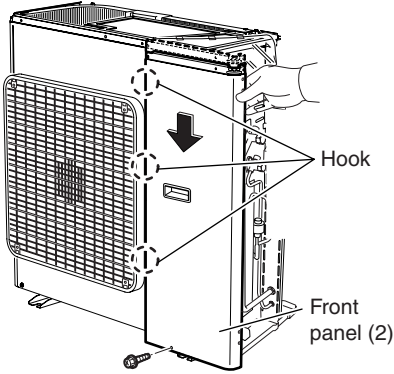
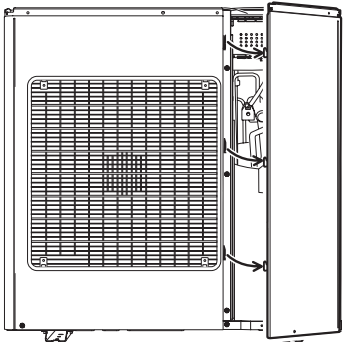
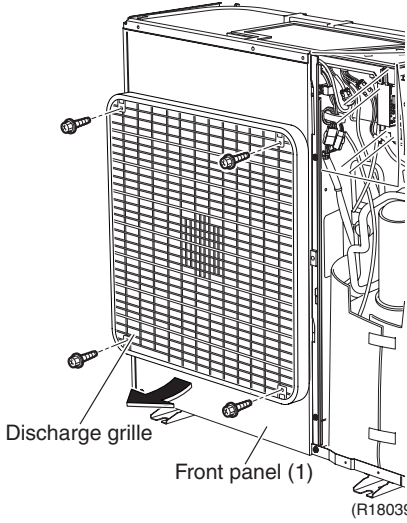
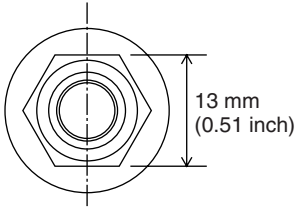
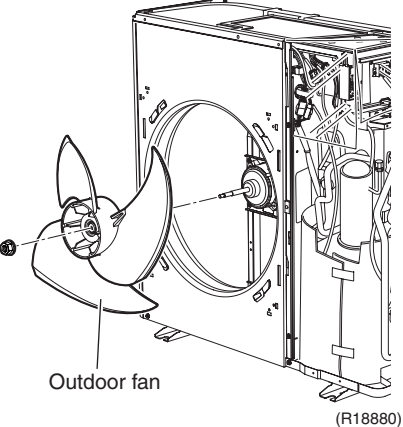
# 1. Outer Panels



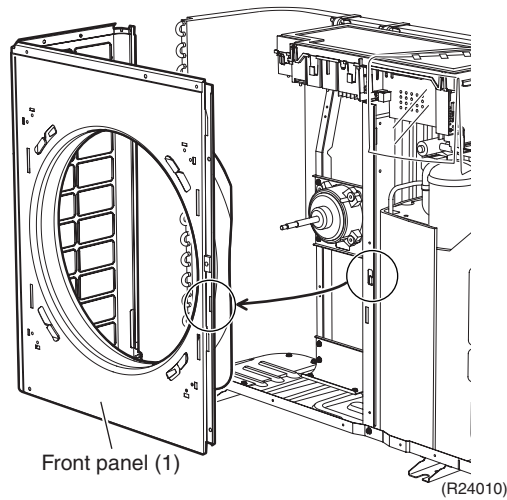
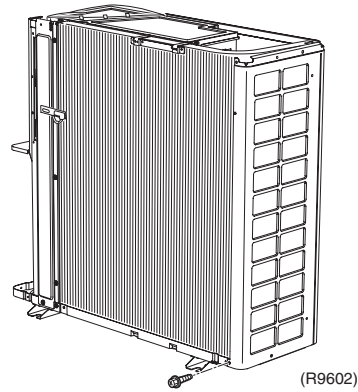
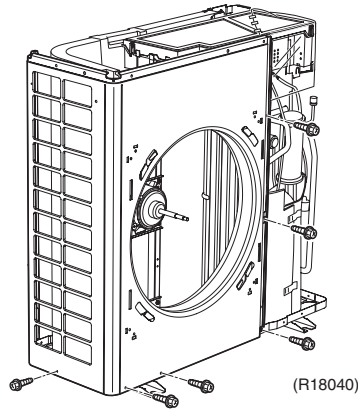
## Warning

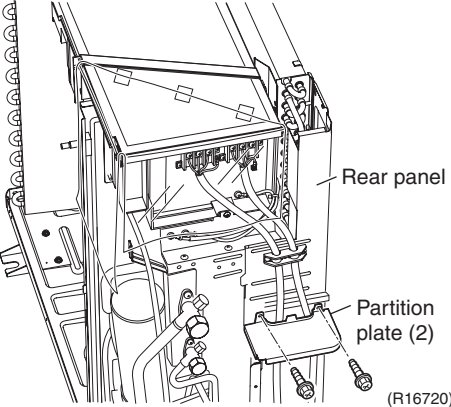
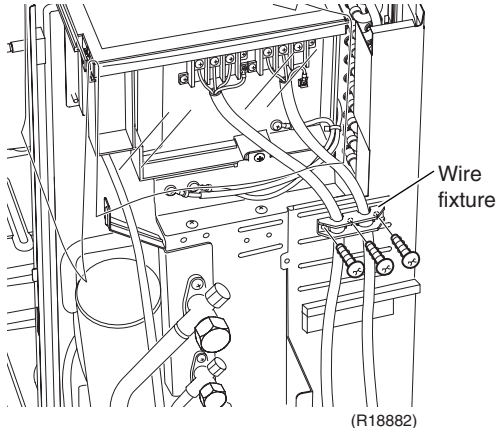
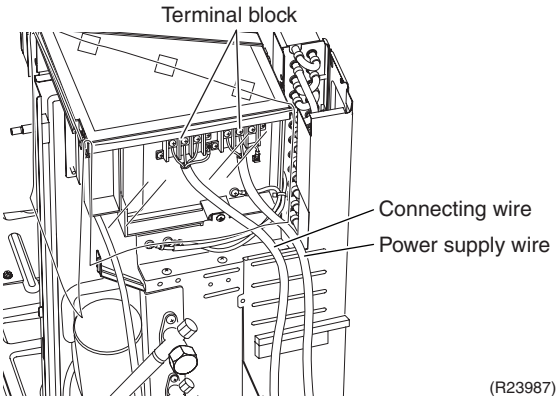
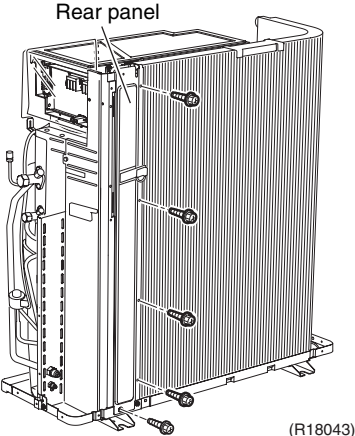
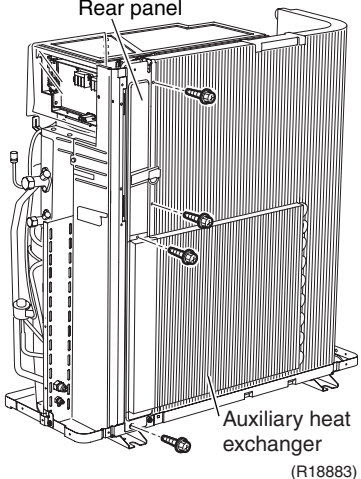
- ♦ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
<p>1. Remove the suction grille.</p> <p>1 Unfasten the 3 hooks at the top.</p> <p>2 Unfasten the 3 hooks at the middle.</p> <p>3 Unfasten the 3 hooks at the bottom and remove the suction grille.</p>	 <p>(R16619)</p>  <p>(R9587)</p>	<ul style="list-style-type: none"> <li>■ The hooks are secured in the clearances of the outdoor heat exchanger fins.</li> </ul>
<p>2. Remove the top and right side panels.</p> <p>1 Remove the 9 screws, and then the top panel.</p> <p>2 Remove the 5 screws on the right side panel.</p> <p>3 Slide the right side panel downward to unfasten the 2 hooks on the back side.</p> <p>4 Remove the right side panel.</p>	 <p>(R18690)</p>  <p>(R18072)</p>	

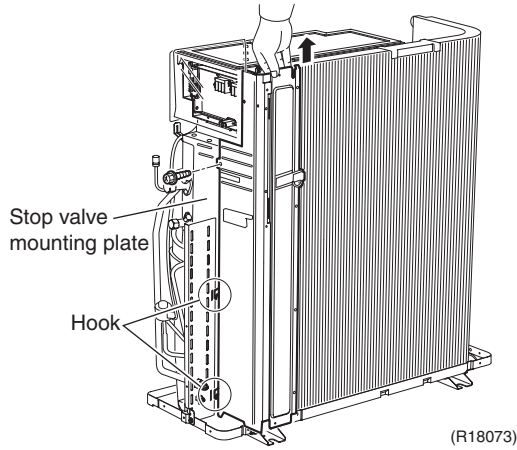
Step	Procedure	Points
3. Remove the front panel (2).		
1 Remove the screw. 2 Slide the front panel (2) downward to unfasten the 3 hooks.		
3 Remove the front panel (2).		<ul style="list-style-type: none"> <li>■ Remove the discharge grille and the outdoor fan before removing the front panel (1).</li> </ul> <ul style="list-style-type: none"> <li>■ Nut size: M8</li> </ul> <div data-bbox="1126 1648 1422 1854" style="text-align: center;">  <p>13 mm (0.51 inch)</p> </div> <p style="text-align: center;">(R18965)</p> <ul style="list-style-type: none"> <li>■ When reassembling, align the ▼ mark of the outdoor fan with the D-cut section of the motor shaft.</li> </ul>
1 Remove the 4 screws on the discharge grille. 2 Pull the bottom of the discharge grille and remove it.		
3 Remove the nut, and then the outdoor fan.		

Step	Procedure	Points
4	Remove the 5 screws on the front side.	
5	Remove the screw at the bottom of the left side.	
6	Remove the screw at the bottom of the back side.	
7	Release the hook and remove the front panel (1).	

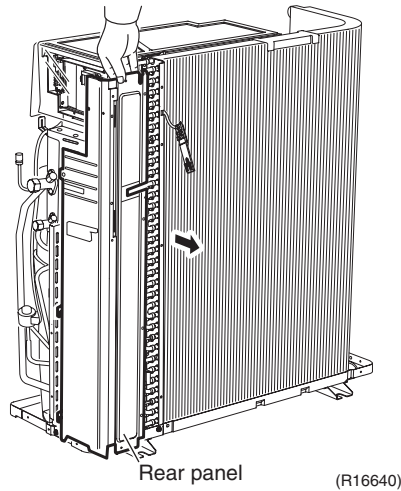
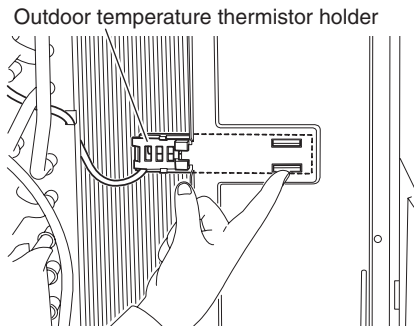


Step	Procedure	Points
5. Remove the rear panel.		
1 Remove the 2 screws on the partition plate (2).		
2 Lift up slightly and remove the partition plate (2).		
3 Remove the 3 screws, and then the wire fixture.		
4 Remove the 7 screws of the terminal block.		
5 Detach the connecting wire and the power supply wire.		
6 Remove the 5 screws.		<p>■ When the unit has an auxiliary heat exchanger, remove the 4 screws.</p> 

Step	Procedure	Points
7	Remove the screw on the stop valve mounting plate.	
8	Lift the rear panel upward to unfasten the 2 hooks.	
9	Release the hooks on the inner-side of the rear panel and detach the outdoor temperature thermistor holder.	
10	Remove the rear panel.	



Inner side of the rear panel





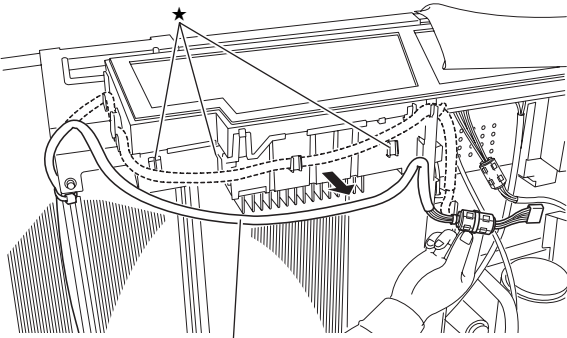
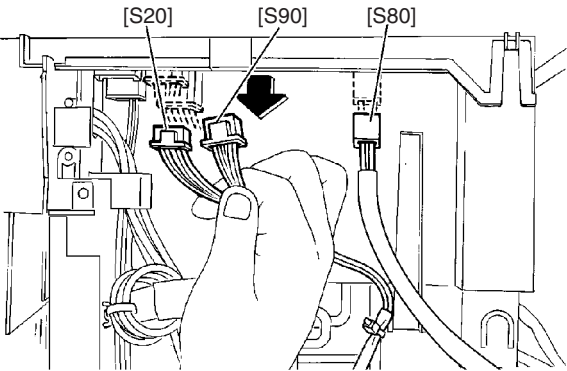
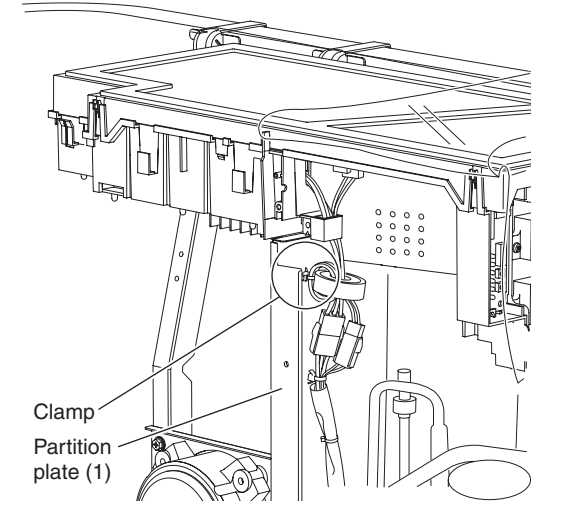
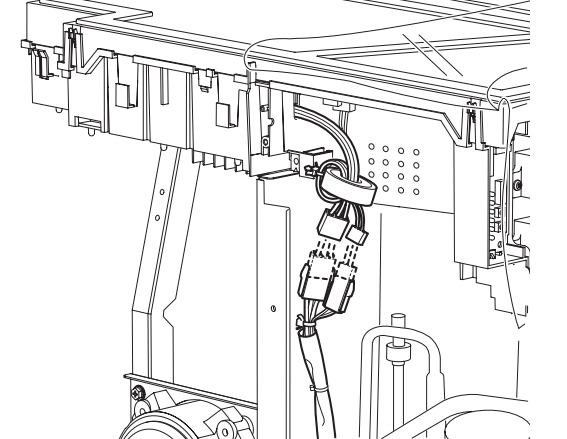
## 2. Electrical Box

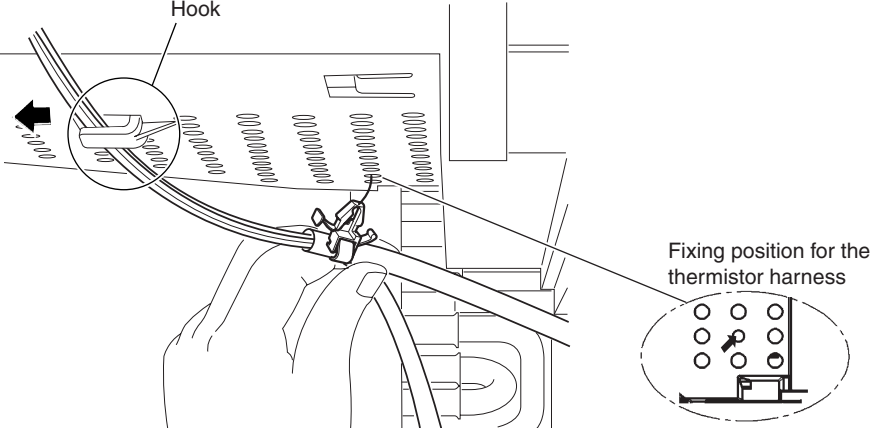
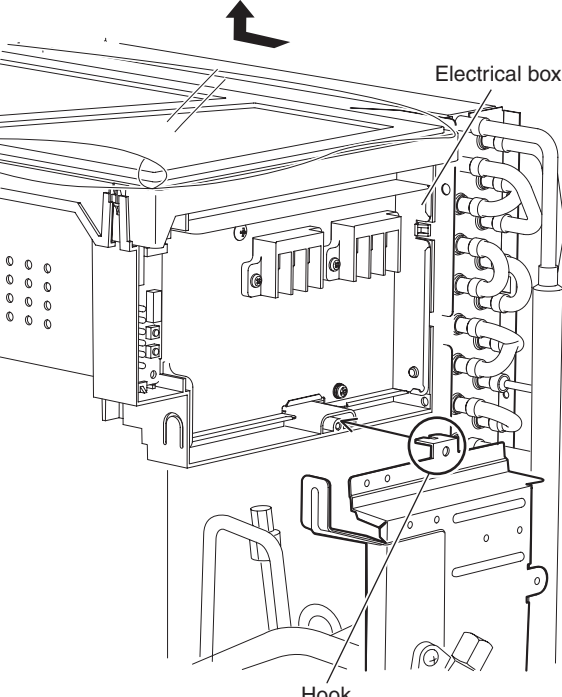


**Warning**

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

Step	Procedure	Points
1	Remove the screw on the partition plate (1).	
	<p style="text-align: center;">Partition plate (1) (R16917)</p>	
2	Remove the screw on the stop valve mounting plate.	
3	Remove the 2 screws to detach the earth/ground wires.	
	<p style="text-align: center;">Earth/ground wire Stop valve mounting plate (R18969)</p>	
4	Disconnect the connector [S70].	[S70]: fan motor
5	Release the 4 clamps attached to the electrical box.	<p>■ When reassembling, insert each clamp into the hole.</p> <p style="text-align: right;">(R23990)</p>
	<p style="text-align: center;">[S70] (R23989)</p>	<p>■ Some models do not have a harness for four way valve coil.</p>

Step	Procedure	Points
6	Release the fan motor lead wire.	★: When reassembling, do not use these 3 hooks.
	 <p style="text-align: center;">Fan motor lead wire</p> <p style="text-align: right;">(R18249)</p>	
7	Disconnect the connectors [S20], [S80] and [S90].	<p>[S20]: electronic expansion valve coil</p> <p>[S80]: four way valve coil</p> <p>[S90]: thermistors</p> <p>■ The cooling only models do not have a harness for [S80].</p>
	 <p style="text-align: right;">(R9622)</p>	
8	Pull out the clamp and release the compressor lead wire from the partition plate (1).	
	 <p style="text-align: right;">(R24011)</p>	
9	Disconnect the relay connector for the overload protector and the compressor.	
	 <p style="text-align: right;">(R9625)</p>	

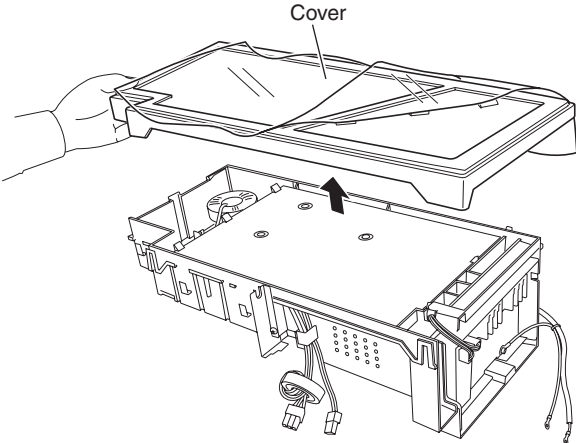
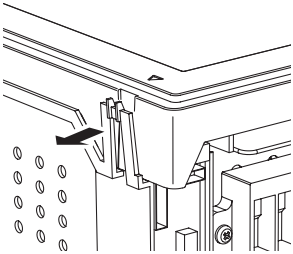
Step	Procedure	Points
10	Release the thermistor harness from the hook at the bottom of electrical box.	<ul style="list-style-type: none"> <li>■ When reassembling, insert the clamp into the hole.</li> </ul>
11	Pull out the clamp of the thermistor harness from the hole of the electrical box.	 <p data-bbox="1171 568 1377 622">Fixing position for the thermistor harness</p> <p data-bbox="1305 779 1377 792">(R23991)</p>
12	Slide the electrical box leftward to unfasten the hook.	 <p data-bbox="938 913 1066 936">Electrical box</p> <p data-bbox="804 1532 852 1554">Hook</p> <p data-bbox="995 1541 1066 1554">(R23992)</p>
13	Lift up and remove the electrical box.	

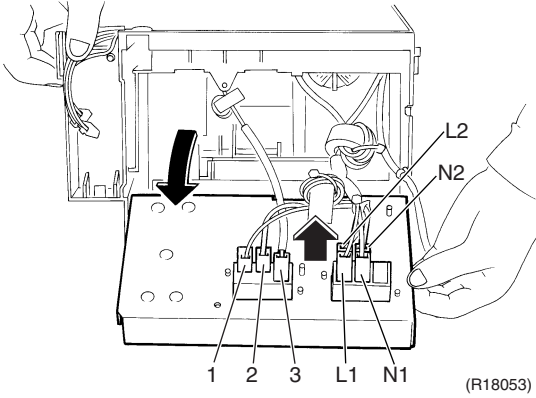
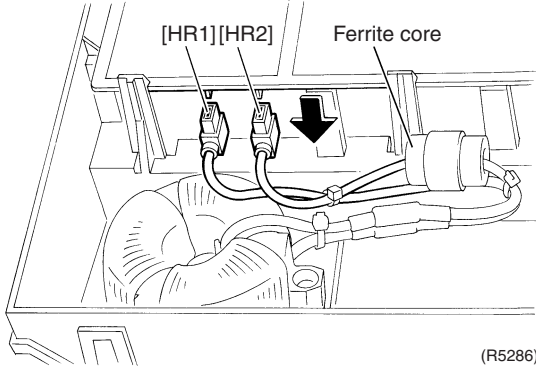
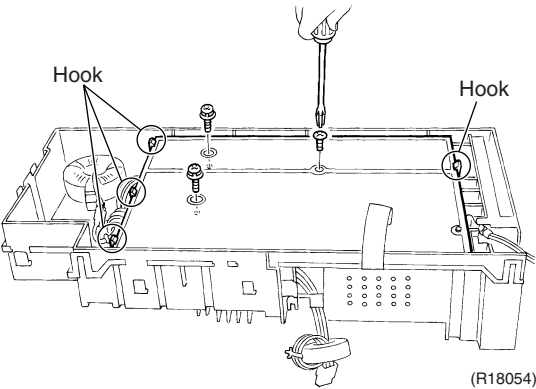
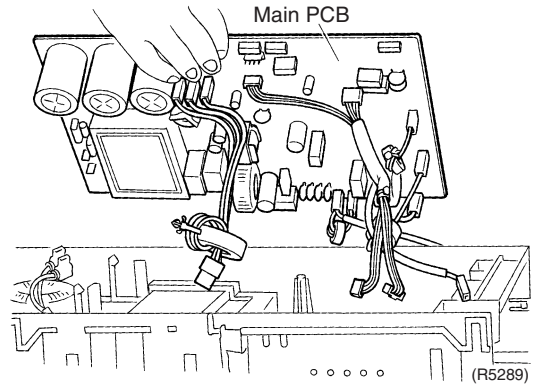
### 3. PCBs



#### 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 cover of the electrical box.	<ul style="list-style-type: none"> <li>■ Release the 4 hooks indicated by ▼.</li> </ul>   <p>(R9611)</p> <p>(R6427)</p>
2	Disconnect the connectors [S52] and [S102] from the service monitor PCB.	[S52], [S102]: main PCB
3	Detach the 4 clamps with pliers and remove the service monitor PCB.	
4	Remove the screws of the terminal board and the earth/ground wire.	
5	Unfasten the hook on the right.	

Step	Procedure	Points
6	Open the terminal board.	1: Black
7	Disconnect the harnesses.	2: White
	 <p data-bbox="975 600 1050 622">(R18053)</p>	3: Red
		L1: Black
		L2: Brown
		N1: White
		N2: Blue
8	Disconnect the 2 harnesses for the reactor [HR1] and [HR2].	[HR1] : white
	 <p data-bbox="975 1003 1050 1025">(R5286)</p>	[HR2] : blue
		<ul style="list-style-type: none"> <li>■ The harness for [HR2] has a ferrite core.</li> </ul>
9	Remove the 3 screws of the main PCB.	
10	Release the 4 hooks.	
	 <p data-bbox="975 1420 1050 1442">(R18054)</p>	
11	Lift up and remove the main PCB.	
	 <p data-bbox="975 1845 1050 1868">(R5289)</p>	

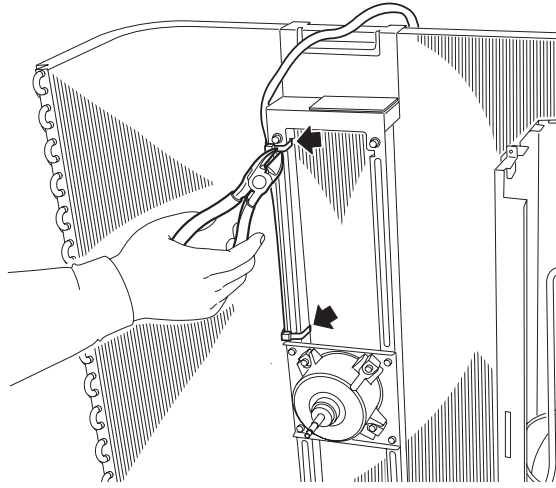
# 4. Fan Motor



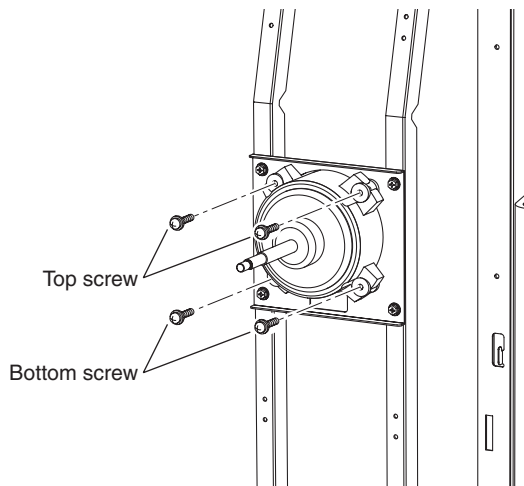
**Warning**

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

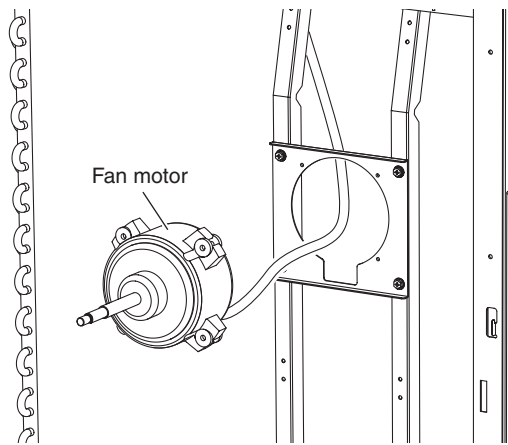
Step	Procedure	Points
1	Cut the 2 clamps.	
2	Remove the 2 bottom screws.	<p>■ Be sure to remove the bottom screws first. If the top screws are removed first, the fan motor may tilt down or fall and cause injury.</p>
3	Remove the 2 top screws.	
4	Remove the fan motor.	<p>■ When reassembling, make sure that the wire harness is facing downward.</p>



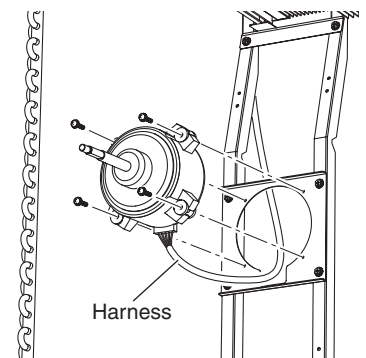
(R9630)



(R24012)



(R6443)



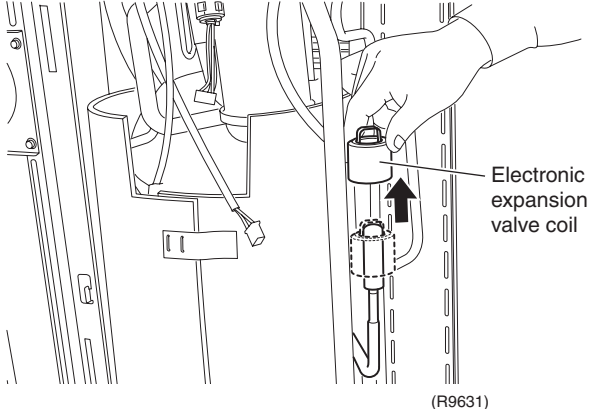
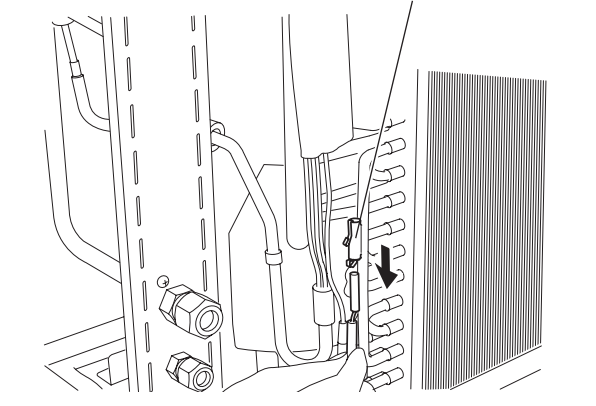
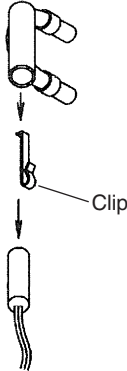
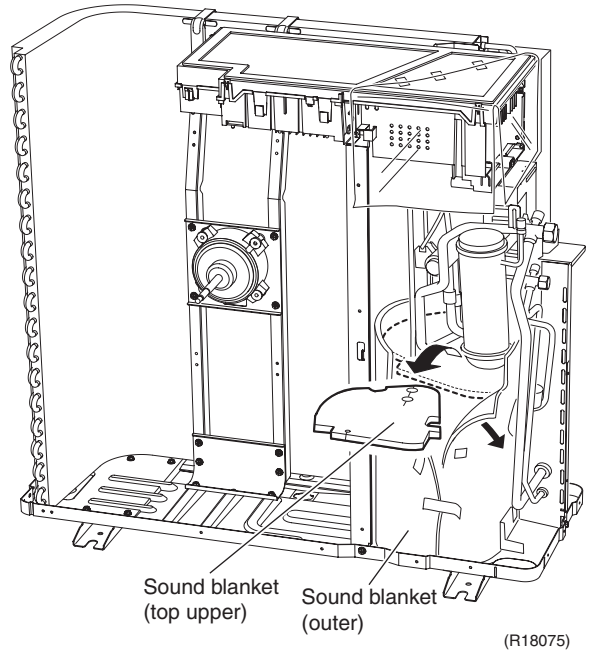
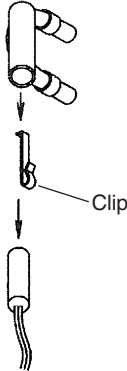
(R6444)

## 5. Coils / Thermistors

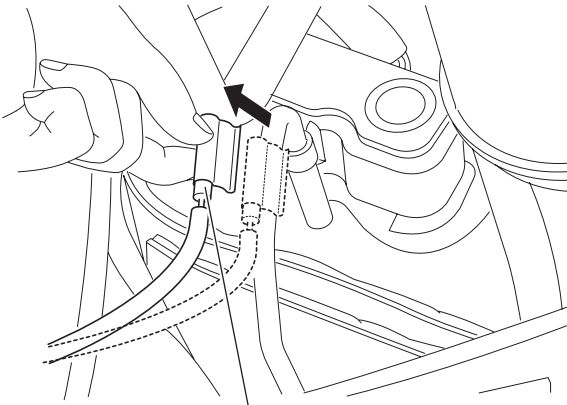
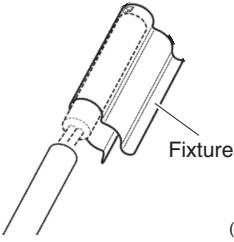
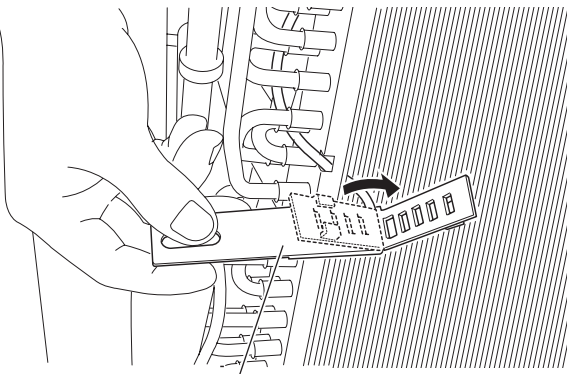
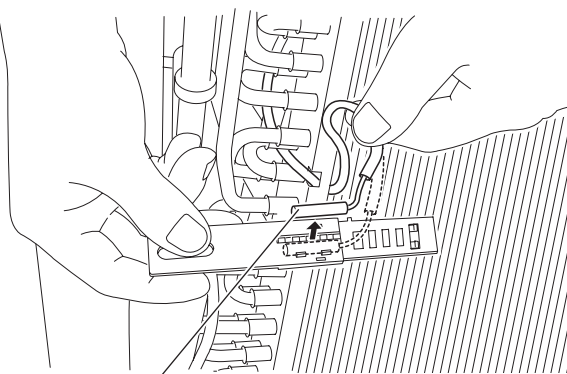
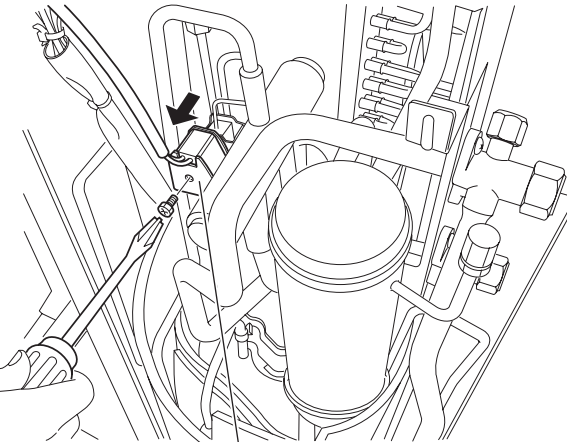


### Warning

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

Step	Procedure	Points
1. Remove the electronic expansion valve coil.	 <p style="text-align: right;">(R9631)</p>	
2. Remove the thermistors.	<p style="text-align: center;">Outdoor heat exchanger thermistor</p>  <p style="text-align: right;">(R17236)</p>  <p style="text-align: right;">(R22516)</p>  <p style="text-align: right;">(R18075)</p>	<ul style="list-style-type: none"> <li>■ The position of the outdoor heat exchanger thermistor varies depending on the model.</li> <li>■ Be careful not to lose the clip for the thermistor.</li> </ul>  <p style="text-align: right;">(R22516)</p> <ul style="list-style-type: none"> <li>■ You can remove the thermistors without removing the electrical box.           <ol style="list-style-type: none"> <li>(1) Disconnect [S90] from the electrical box (main PCB).</li> <li>(2) Release the thermistor harness from the hook at the bottom of electrical box.</li> <li>(3) Pull out the clamp of the thermistor harness from the hole of the electrical box.</li> </ol> </li> <li>■ The design of the sound blankets varies depending on the model.</li> </ul>
1 Pull out the outdoor heat exchanger thermistor.		
2 Slightly open the sound blanket (outer).		
3 Remove the sound blanket (top upper).		



Step	Procedure	Points	
4	Remove the discharge pipe thermistor.	<ul style="list-style-type: none"> <li>Be careful not to lose the fixtures for the thermistors.</li> </ul>	
 <p style="text-align: center;">Discharge pipe thermistor (R9635)</p>		 <p style="text-align: right;">(R21395)</p>	
5	At the back side, open the outdoor temperature thermistor holder.	 <p style="text-align: center;">Outdoor temperature thermistor holder (R9636)</p>	
6	Release the outdoor temperature thermistor.	 <p style="text-align: center;">Outdoor temperature thermistor (R9637)</p>	
3. Remove the four way valve coil.	 <p style="text-align: center;">Four way valve coil (R18076)</p>	<ul style="list-style-type: none"> <li>The cooling only models have no four way valve coil.</li> </ul>	
1	Remove the screw, and then the four way valve coil.		



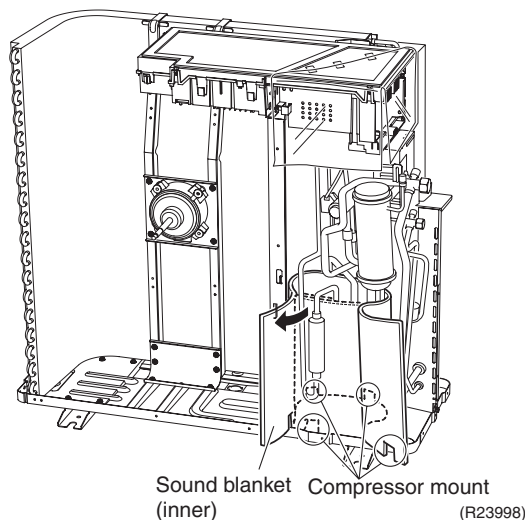
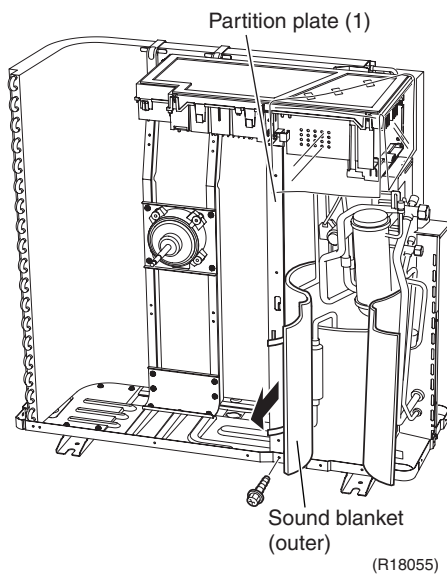
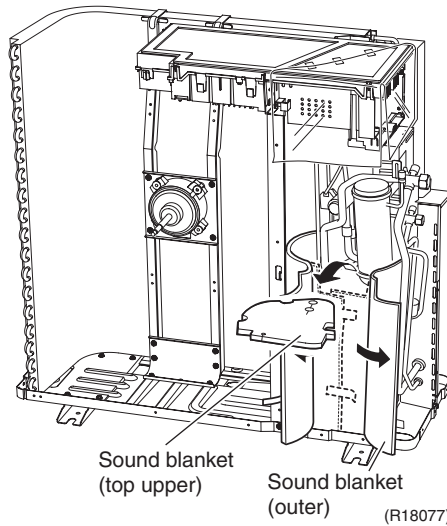
## 6. Sound Blankets



### Warning

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

Step	Procedure	Points
1	Open the sound blanket (outer).	<ul style="list-style-type: none"> <li>■ The sound blanket is fragile. Pass the discharge pipe through it carefully.</li> </ul>
2	Remove the sound blanket (top upper).	<ul style="list-style-type: none"> <li>■ The design of the sound blankets varies depending on the model.</li> </ul>
3	Remove the screw and slightly push the partition plate (1) to the left for easy work.	<ul style="list-style-type: none"> <li>■ Since piping ports are torn easily, remove the sound blanket carefully.</li> </ul>
4	Remove the sound blanket (outer).	
5	Remove the sound blanket (inner).	<ul style="list-style-type: none"> <li>■ The sound blanket is fragile. Be careful of the notches of the compressor mount (4 locations).</li> </ul>



## 7. 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.



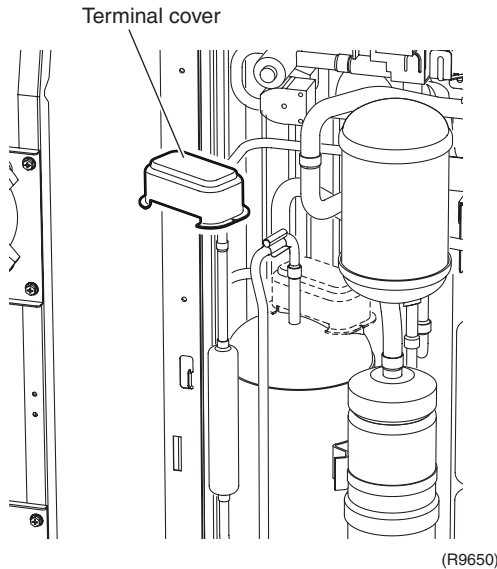
### Caution

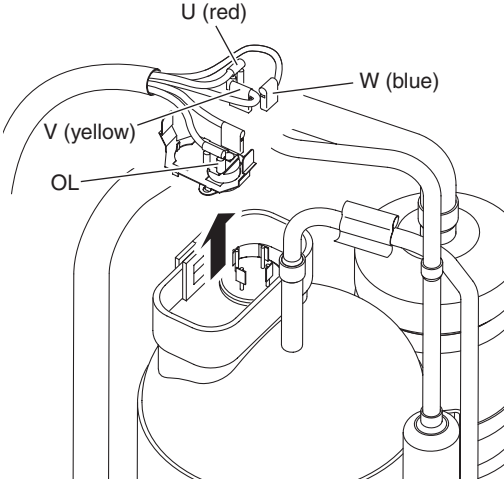
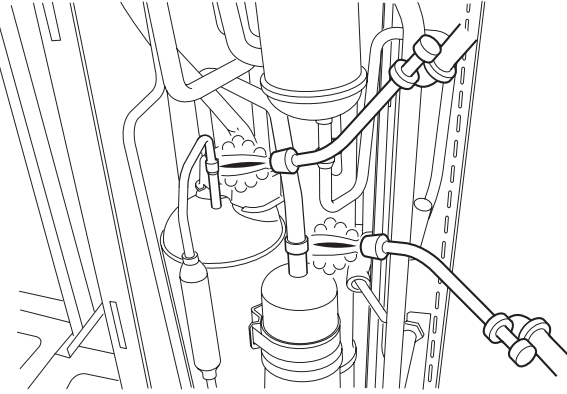
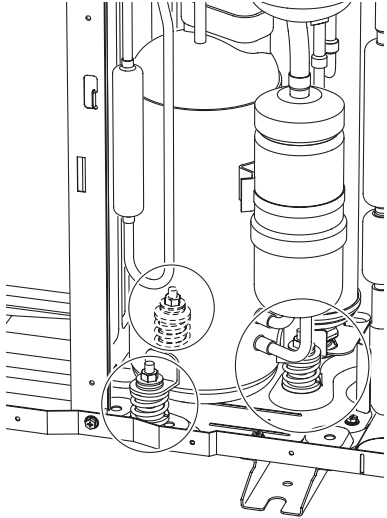
- ♦ From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.
- ♦ Restore the piping by non-oxidation brazing.



### 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.	<div style="text-align: center;">  <p>(R9650)</p> </div>

Step	Procedure	Procedure	Points
2	Pull out the 3 compressor lead wires.	 <p data-bbox="970 741 1034 763">(R9471)</p>	
3	Remove the overload protector (OL).	 <p data-bbox="959 1211 1023 1234">(R9646)</p>	<ul style="list-style-type: none"> <li data-bbox="1094 786 1437 875">■ Some models have putties. Make sure to remove the putties beforehand.</li> </ul>
4	Heat up the 2 brazed parts and withdraw the pipings with pliers.		
5	Remove the 3 nuts.	 <p data-bbox="959 1771 1023 1794">(R7021)</p>	
6	Remove the compressor.		

# Revision History

Month / Year	Version	Revised contents
11 / 2012	Si001272	First edition
04 / 2013	Si001272_A	Model addition: RKS33JV2S, RKS85HVM, RKS85JVMG, RK(X)S70/80/90MVL
08 / 2015	Si001272EB	Model addition: RKM33NV2S, RXM71/80/90NVL
09 / 2016	Si001272EC	Correction of errors

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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