

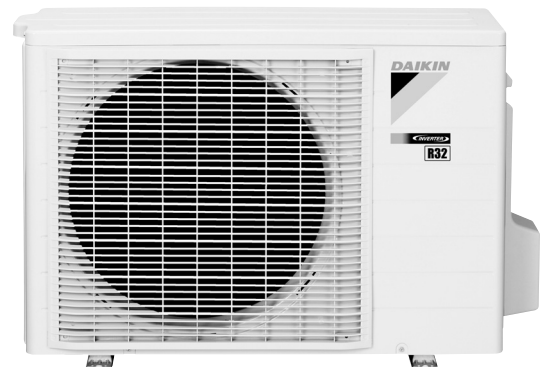
REMOVAL PROCEDURE



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

5.0/6.0/7.1 kW Class

-  Outdoor Unit
-  Inverter
-  Pair Type



Service Manual Removal Procedure

Outdoor Unit

●Cooling Only

**RKM50PRV16
RKM60PRV16**

**RKM50QRV16
RKM60QRV16
RKM50RRV16
RKM60RRV16**

**RKMA50QRV16
RKMA60QRV16
RKMA50RRV16
RKMA60RRV16**

**RKMD50QRV16
RKMD60QRV16
RKMD50RRV16
RKMD60RRV16**

**RKP71QRV16
RKP71RRV16**

**RKPA71QRV16
RKPA71RRV16**

**RKPD71QRV16
RKPD71RRV16**

Table of Contents

1. Outer Panels	2
2. Outdoor Fan / Fan Motor.....	4
3. Electrical Box	6
4. PCBs.....	10
5. Thermistor ASSY	12
6. Partition Plate / Sound Blankets.....	14
7. Electronic Expansion Valve.....	16
8. Compressor.....	18



Note:

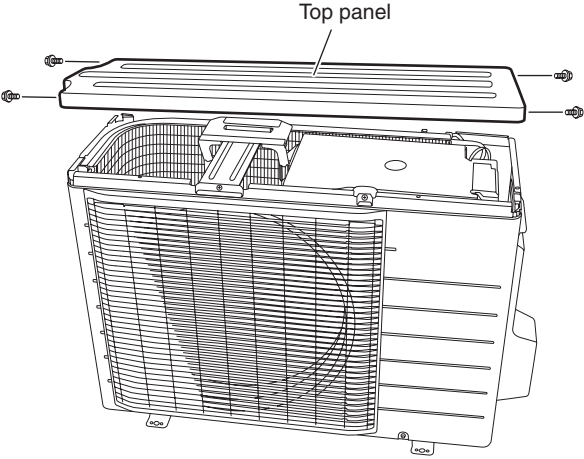
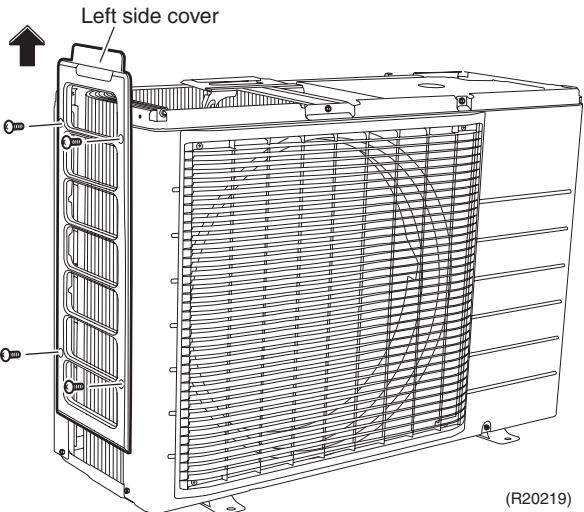
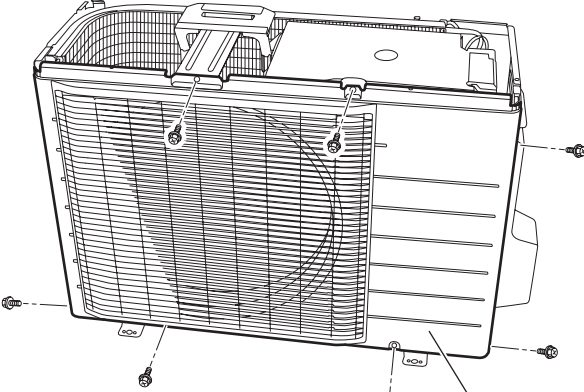
♦ The illustrations may be slightly different depending on the model.

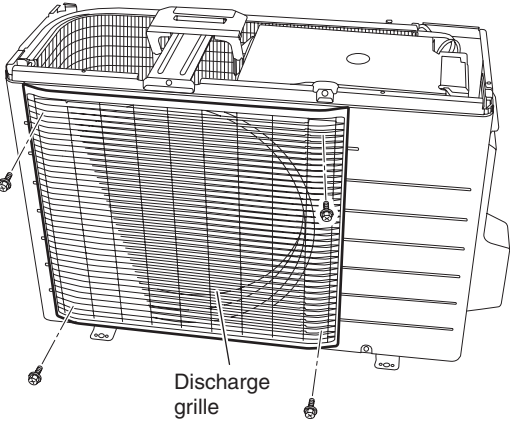
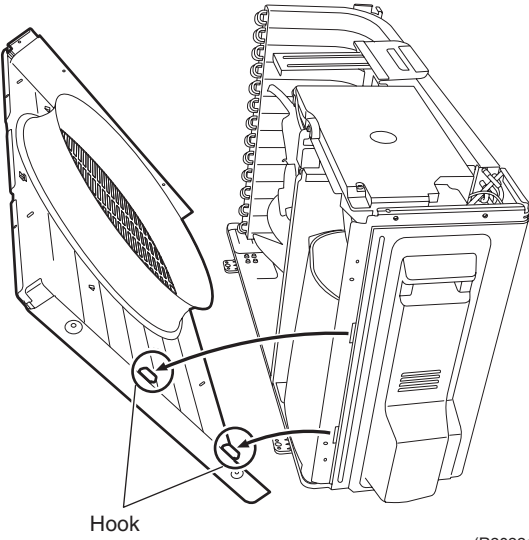
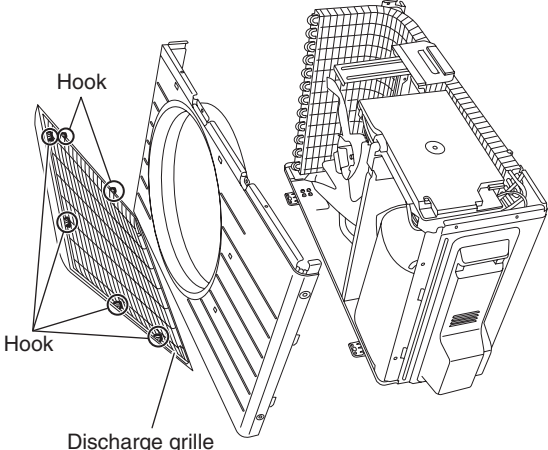
1. Outer Panels



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 4 screws, and then the top panel.	 <p style="text-align: center;">Top panel</p> <p style="text-align: right;">(R20218)</p>
2	Remove the 4 screws, and then the left side cover.	 <p style="text-align: center;">Left side cover</p> <p style="text-align: right;">(R20219)</p>
3	Remove the 7 screws of the front panel.	 <p style="text-align: center;">Front panel</p> <p style="text-align: right;">(R23688)</p>

Step	Procedure	Points
4	Remove the 4 screws of the discharge grille.	
	 <p style="text-align: center;">Discharge grille</p> <p style="text-align: right;">(R23689)</p>	
5	Unfasten the 2 hooks and remove the front panel.	<p>■ When reassembling, make sure that the 2 hooks are securely fastened.</p>
	 <p style="text-align: center;">Hook</p> <p style="text-align: right;">(R20221)</p>	
6	Unfasten the 6 hooks and remove the discharge grille.	
	 <p style="text-align: center;">Hook</p> <p style="text-align: center;">Discharge grille</p> <p style="text-align: right;">(R20222)</p>	

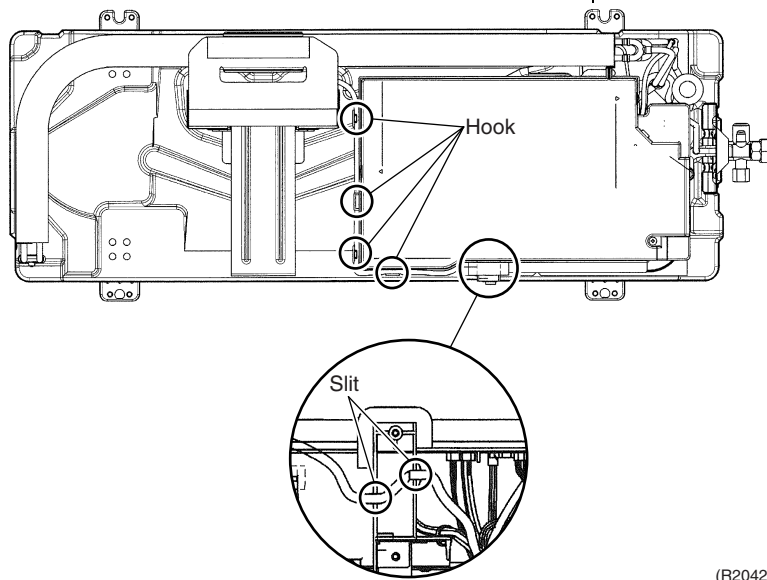
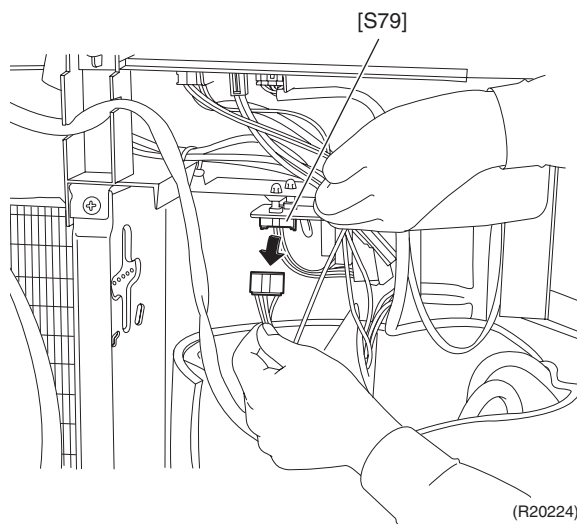
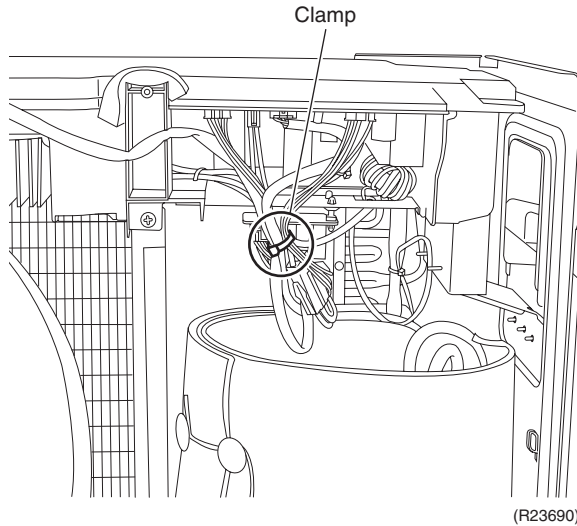
2. Outdoor Fan / Fan Motor

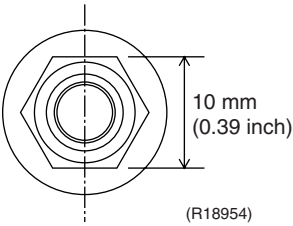
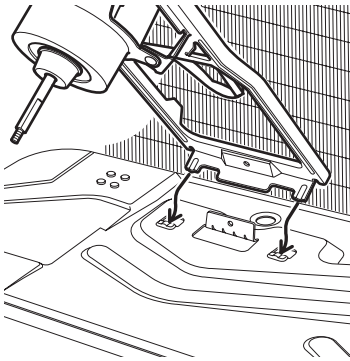
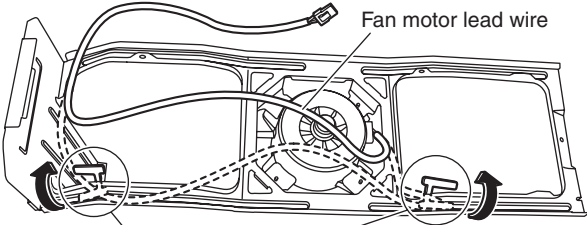
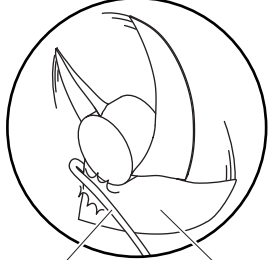
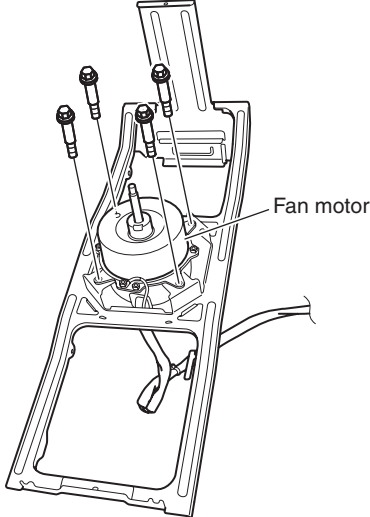


Warning

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

Step	Procedure	Points
1	Cut the clamp.	
2	Disconnect the connector [S79].	[S79]: fan motor
3	Release the fan motor lead wire from the 2 slits and the 4 hooks on the electrical box.	



Step	Procedure	Points
4	Remove the nut, and then the outdoor fan.	<p>■ Nut size: M6</p>  <p>10 mm (0.39 inch)</p> <p>(R18954)</p> <p>■ When reassembling, align the ▼ mark of the outdoor fan with the D-cut section of the motor shaft.</p>
5	Remove the screw of the fan motor fixing frame.	<p>■ When reassembling, fit the 2 lower hooks into the bottom frame.</p>
6	Unfasten the 2 hooks at the bottom and remove the fan motor fixing frame.	 <p>(R22574)</p>
7	Open the 2 hooks and release the fan motor lead wire.	<p>■ When reassembling, put the fan motor lead wire through the back of the fan motor to avoid entanglement with the outdoor fan.</p>
8	Remove the 4 screws, and then the fan motor.	 <p>Fan motor lead wire</p> <p>Hook</p> <p>(R18433)</p>  <p>Lead wire</p> <p>Outdoor fan</p> <p>(R3249)</p>
	 <p>Fan motor</p> <p>(R19433)</p>	

3. Electrical Box

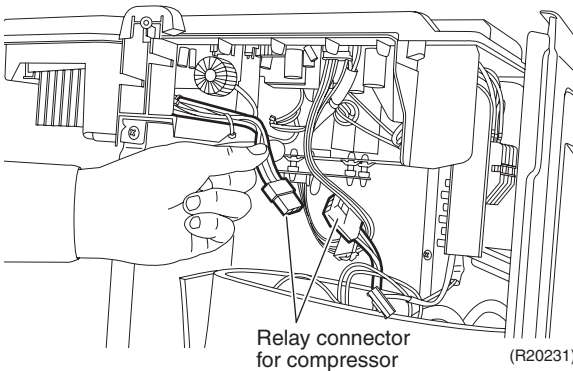
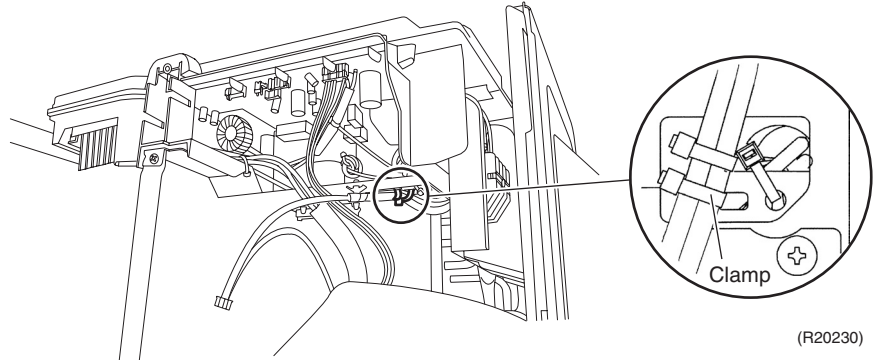
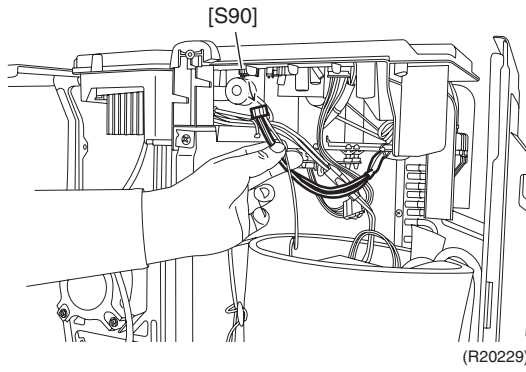
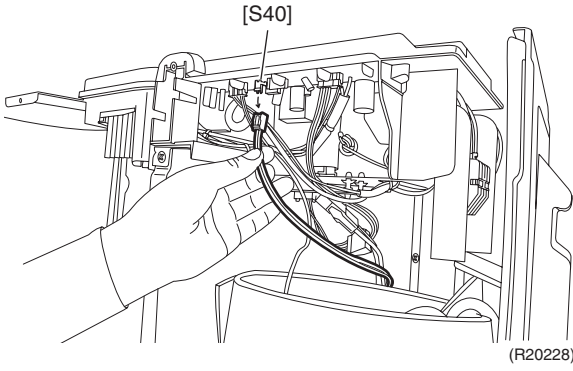


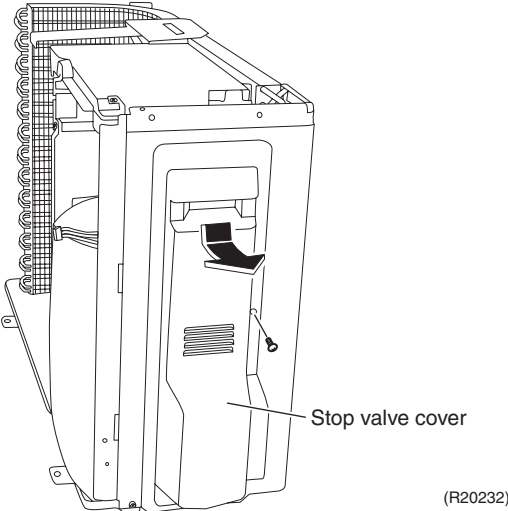
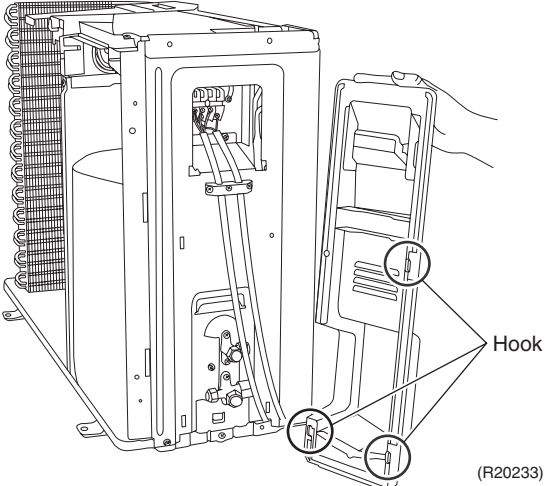
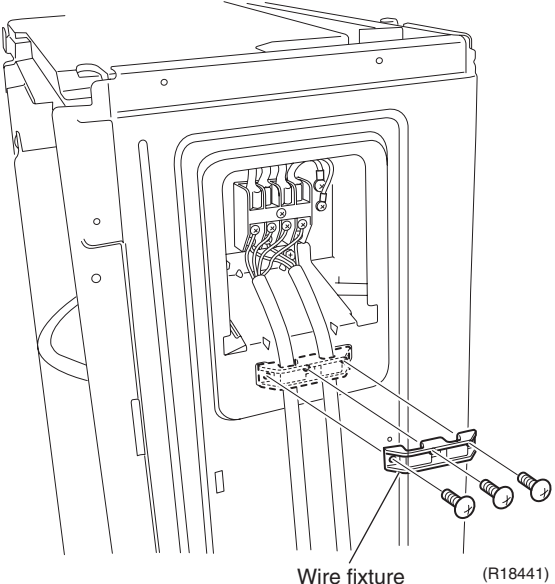
Warning

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

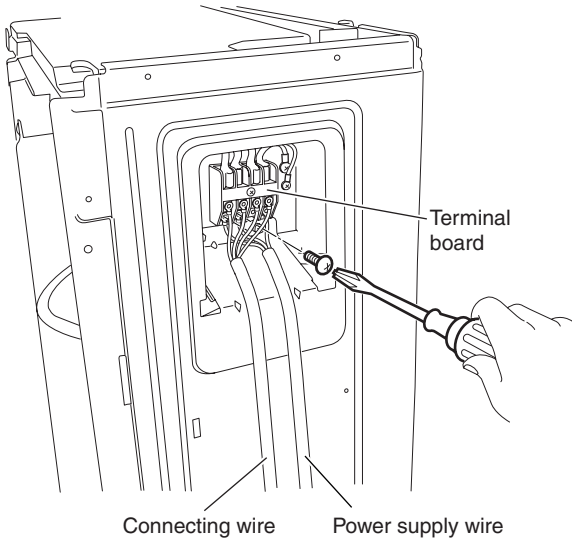
Step	Procedure	Points
1	Cut the clamp.	
2	Disconnect the connector [S79].	[S79]: fan motor
3	Disconnect the connector [S20].	[S20]: electronic expansion valve coil

Step	Procedure	Points
4	Disconnect the connector [S40].	[S40]: overload protector
5	Disconnect the connector [S90].	[S90]: thermistors
6	Cut the clamp.	
7	Disconnect the relay connector for the compressor.	

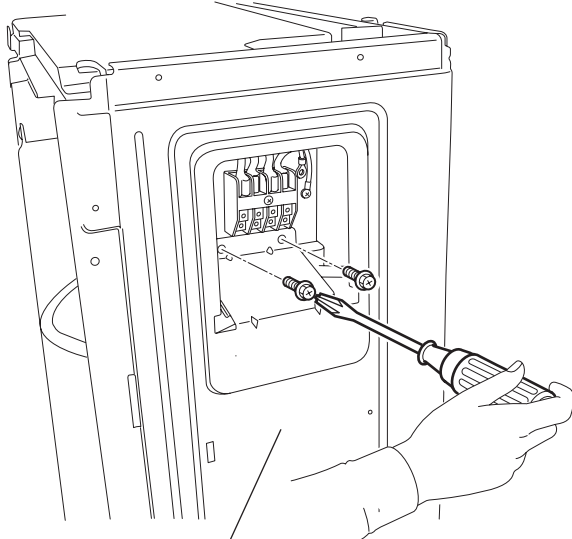


Step	Procedure	Points
8	Remove the screw.	
9	Slide the stop valve cover downward and remove it.	
		
		<ul style="list-style-type: none"> ■ When reassembling, make sure to fit the 3 hooks.
10	Remove the 3 screws, and then the wire fixture.	
		

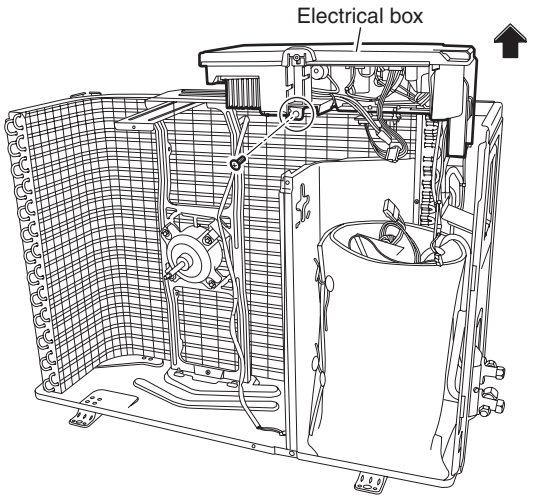
Step	Procedure	Points
11	Remove the 7 screws and disconnect the connecting wire and the power supply wire.	
12	Remove the 2 screws on the right side panel.	
13	Remove the screw on the partition plate.	
14	Lift up and remove the electrical box.	



(R20431)



(R20432)



(R20234)

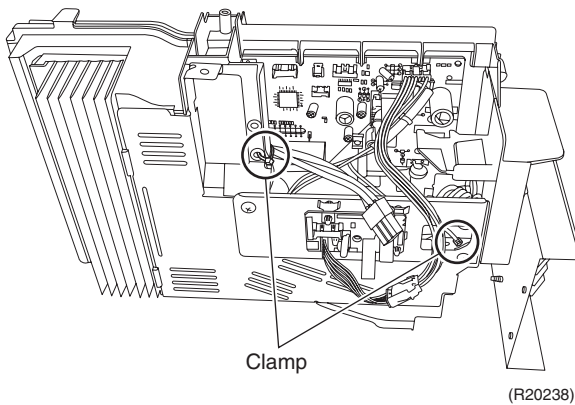
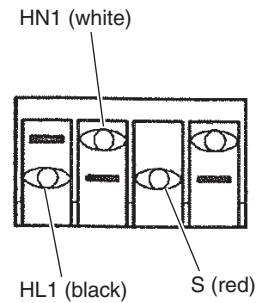
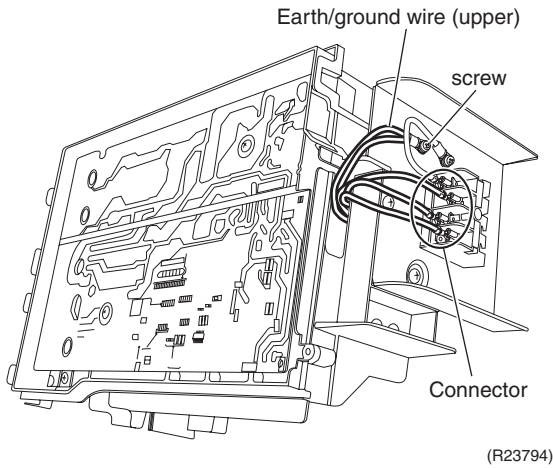
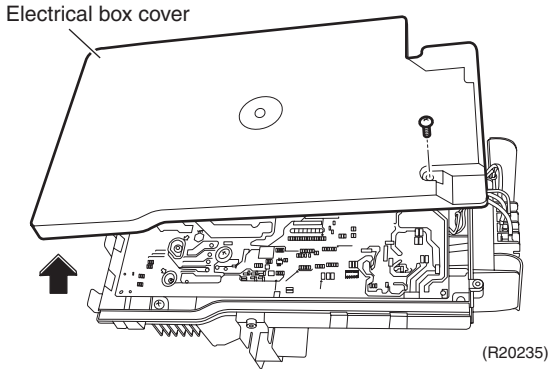
4. PCBs

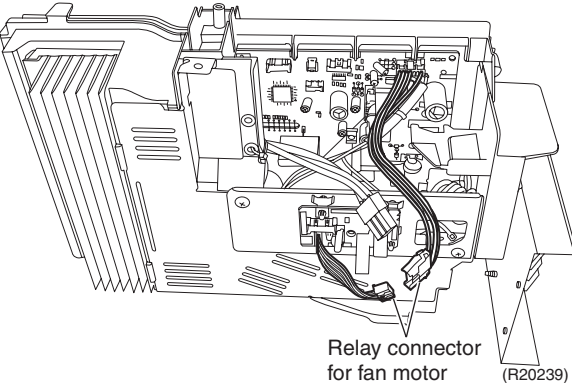
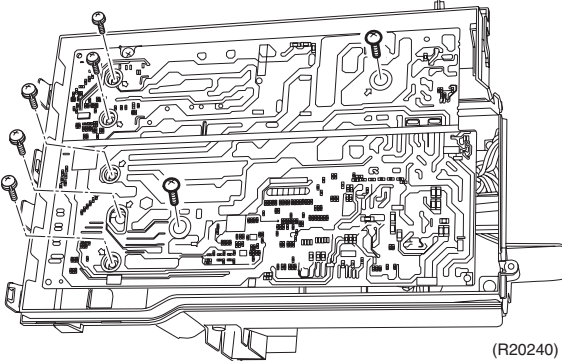
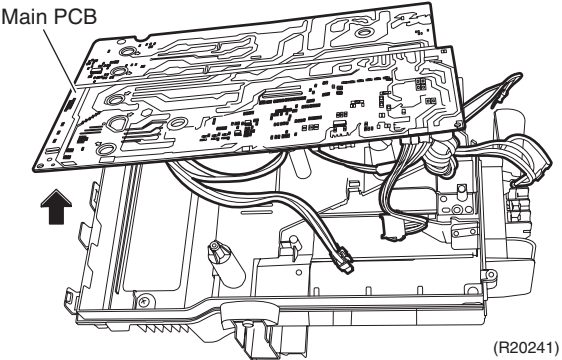
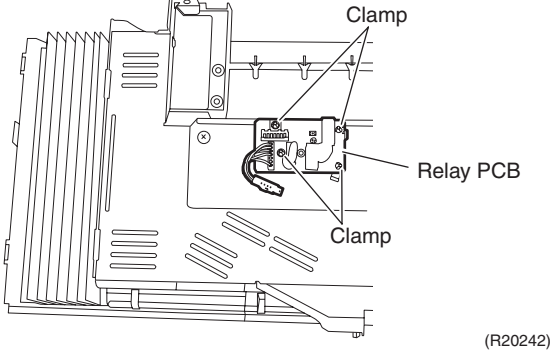


Warning

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

Step	Procedure	Points
1	Remove the screw, and then the electrical box cover.	
2	Disconnect the 3 connectors from the terminal board.	
3	Remove the screw and release the earth/ground wire (upper).	
4	Cut the 2 clamps.	



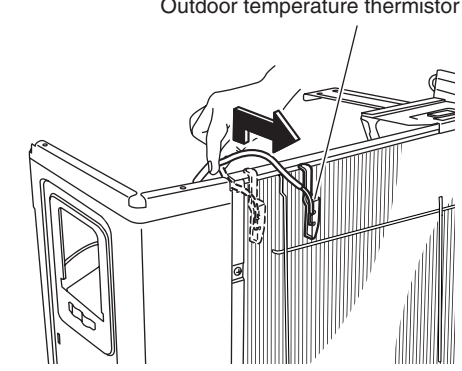
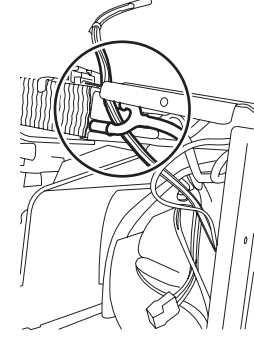
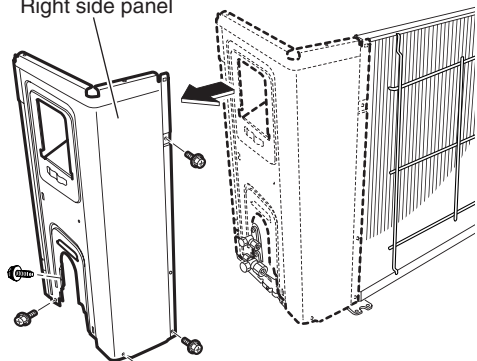
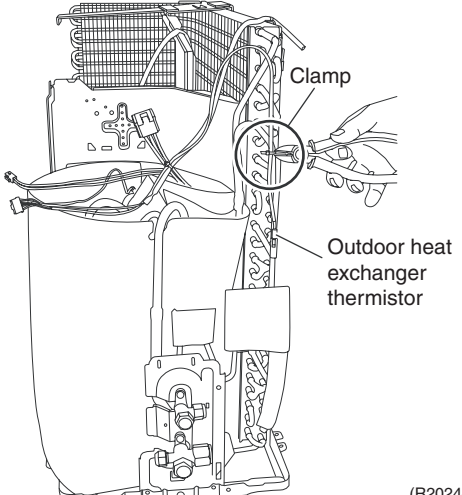
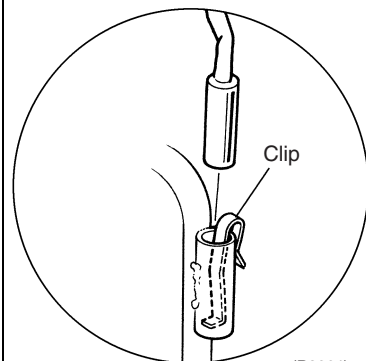
Step	Procedure	Points
5	Disconnect the relay connector for the fan motor.	
	 <p>Relay connector for fan motor (R20239)</p>	
6	Remove the 7 screws.	
	 <p>(R20240)</p>	
7	Remove the main PCB.	
	 <p>Main PCB</p> <p>(R20241)</p>	
8	Turn over the electrical box.	
9	Pinch the 4 clamps and remove the relay PCB.	
	 <p>Clamp</p> <p>Relay PCB</p> <p>Clamp</p> <p>(R20242)</p>	

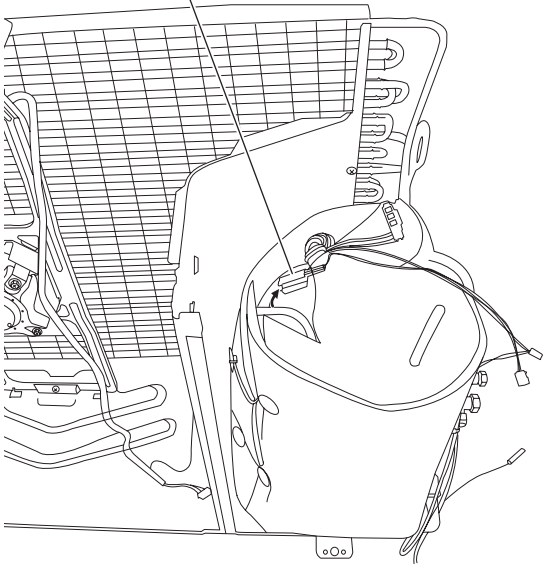
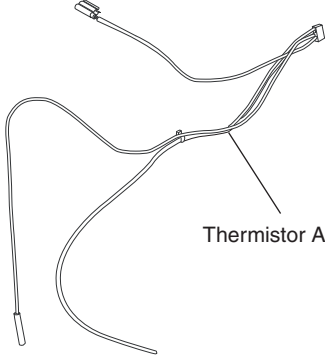
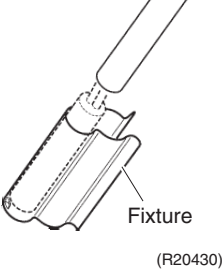
5. Thermistor ASSY



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 outdoor temperature thermistor.	 <p style="text-align: right;">(R19516)</p>	<p>■ When reassembling, pass the outdoor temperature thermistor through the top U-bend of the outdoor heat exchanger.</p>  <p style="text-align: right;">(R23691)</p>
2 3	Remove the 5 screws of the right side panel. Remove the right side panel.	 <p style="text-align: right;">(R19517)</p>	
4	Cut the clamp.	 <p style="text-align: right;">(R20244)</p>	<p>■ Be careful not to lose the clip for the thermistor.</p>  <p style="text-align: right;">(R3264)</p>
5	Pull out the outdoor heat exchanger thermistor.		

Step		Procedure	Points
6	Release the discharge pipe thermistor.	<p data-bbox="576 241 719 293">Discharge pipe thermistor</p>  <p data-bbox="991 869 1059 891">(R22575)</p>	<p data-bbox="1094 215 1417 275">■ Be careful not to lose the fixture for the thermistor.</p>
7	Remove the thermistor ASSY.	 <p data-bbox="799 1160 967 1182">Thermistor ASSY</p> <p data-bbox="995 1267 1064 1290">(R20246)</p>	 <p data-bbox="1294 506 1362 528">Fixture</p> <p data-bbox="1321 551 1390 573">(R20430)</p>

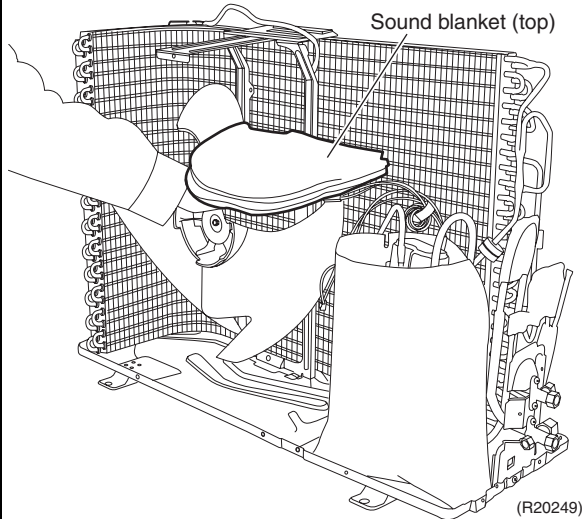
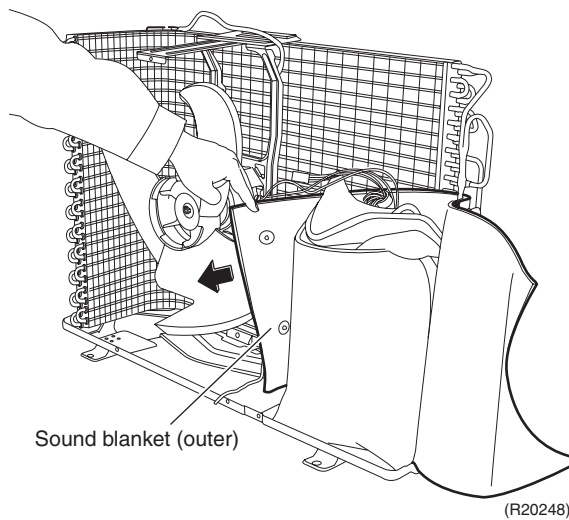
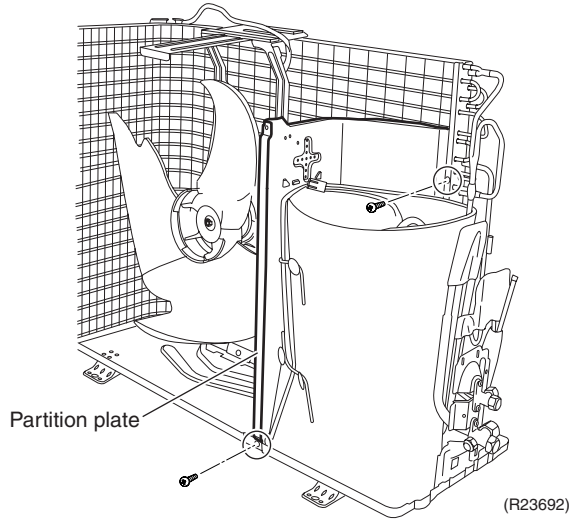
6. Partition Plate / Sound Blankets

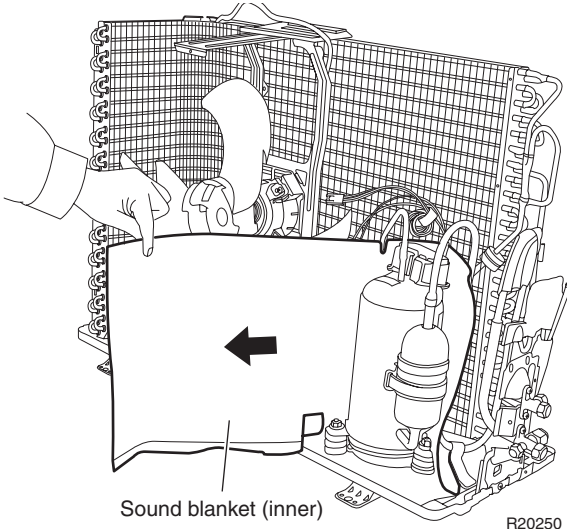
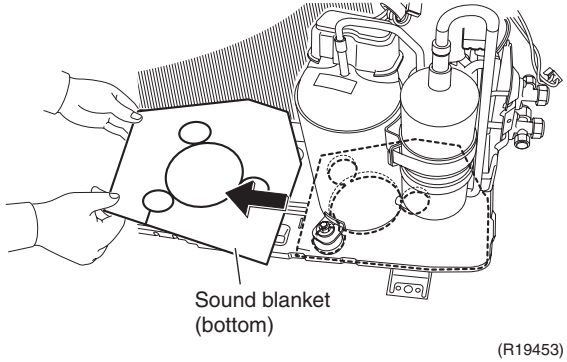


Warning

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

Step	Procedure	Points
1	Remove the 2 screws, and then the partition plate.	■ Since the piping ports are torn easily, remove the sound blanket carefully.
2	Untie the string and open the sound blanket (outer).	
3	Pull out the sound blanket (outer).	
4	Remove the sound blanket (top).	



Step	Procedure	Points	
5	Pull out the sound blanket (inner).	 <p data-bbox="616 723 820 752">Sound blanket (inner)</p> <p data-bbox="1002 741 1066 763">R20250</p>	
6	Pull out the sound blanket (bottom).	 <p data-bbox="691 1167 831 1218">Sound blanket (bottom)</p> <p data-bbox="994 1218 1066 1240">(R19453)</p>	<p data-bbox="1094 797 1457 925">■ When reassembling, mount the sound blankets and the partition plate in the following order.</p> <ol data-bbox="1129 931 1326 1095" style="list-style-type: none"> <li data-bbox="1129 931 1251 963">(1) Bottom <li data-bbox="1129 969 1230 1001">(2) Inner <li data-bbox="1129 1008 1235 1039">(3) Outer <li data-bbox="1129 1046 1214 1077">(4) Top <li data-bbox="1129 1084 1326 1115">(5) Partition plate

7. Electronic Expansion 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.)



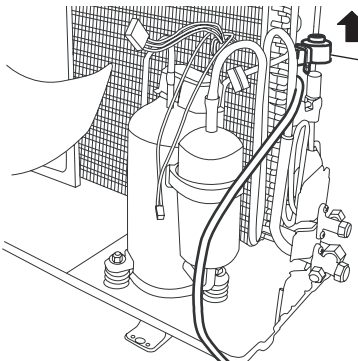
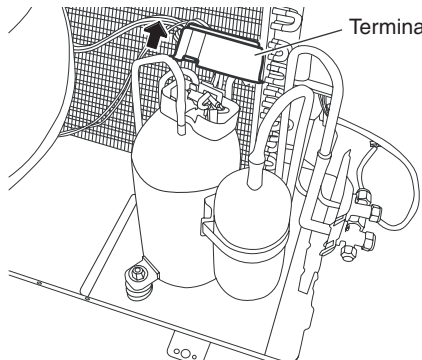
Caution

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

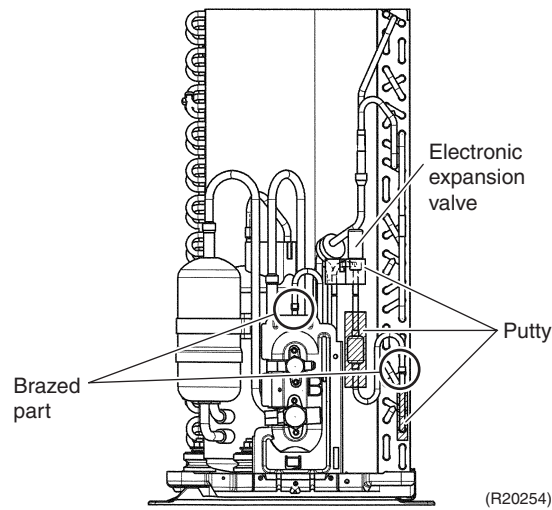
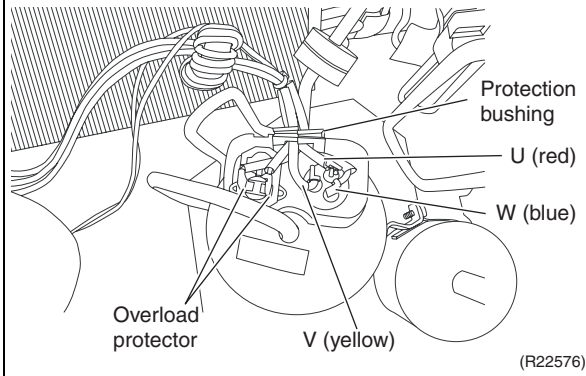


Note

- ◆ 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	Pull out the electronic expansion valve coil.	 <p>Electronic expansion valve coil</p> <p>(R20251)</p>
2	Remove the terminal cover.	 <p>Terminal cover</p> <p>(R20252)</p>

Step	Procedure	Points
3	Remove the protection bushing.	
4	Disconnect the compressor lead wires and the overload protector.	
5	Remove the putties.	
6	Heat up the 2 brazed parts and remove the electronic expansion valve.	



8. Compressor



Warning

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



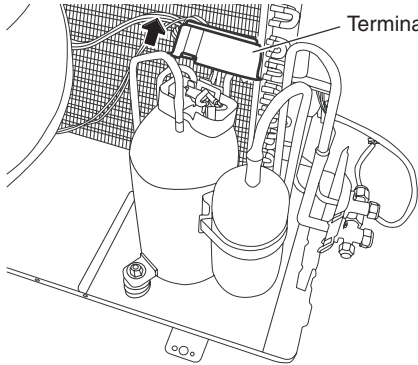
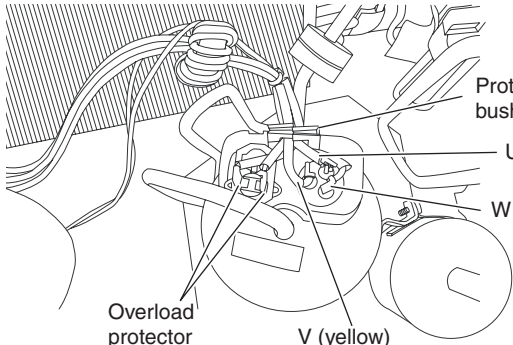
Caution

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

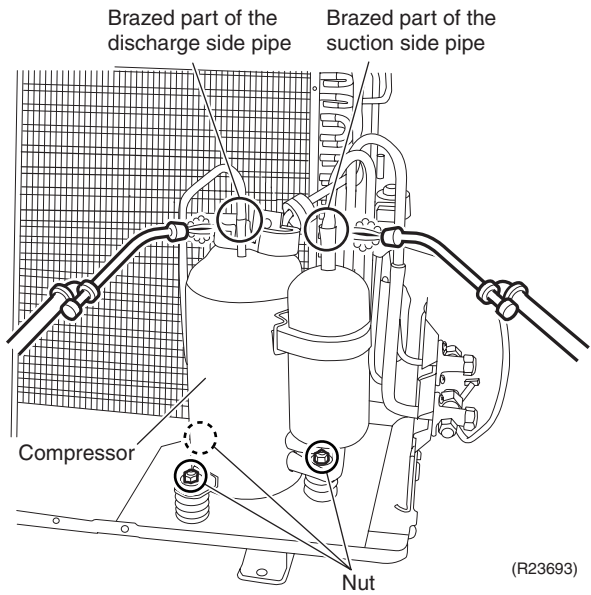


Note

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

Step	Procedure	Diagram	Points
1	Remove the terminal cover.	 <p style="text-align: right;">Terminal cover</p> <p style="text-align: right;">(R20252)</p>	
2 3	Remove the protection bushing. Disconnect the compressor lead wires and the overload protector.	 <p style="text-align: right;">Protection bushing</p> <p style="text-align: right;">U (red)</p> <p style="text-align: right;">W (blue)</p> <p style="text-align: right;">V (yellow)</p> <p style="text-align: right;">Overload protector</p> <p style="text-align: right;">(R22576)</p>	

Step	Procedure	Points
4	Heat up the brazed part of the discharge side pipe and disconnect it.	
5	Heat up the brazed part of the suction side pipe and disconnect it.	
6	Remove the 3 nuts of the compressor.	
7	Lift up the compressor and remove it.	



Revision History

Month / Year	Version	Revised contents
05 / 2014	Si001405E	First edition
11 / 2015	Si001405EA	Model addition: RKM50/60QRV16, RKMA50/60QRV16, RKMD50/60QRV16, RKP71QRV16, RKPA71QRV16, RKP71QRV16
08 / 2016	Si001405EB	Model addition: RKM50/60RRV16, RKMA50/60RRV16, RKMD50/60RRV16, RKP71RRV16, RKPA71RRV16, RKP71RRV16

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/products/ac/>

©All rights reserved