



Si001559E

REMOVAL PROCEDURE



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

18000/24000/28000 Btu/h Class

-  Outdoor Unit
-  Inverter
-  Pair Type



Service Manual Removal Procedure

Outdoor Unit

●Cooling Only

**RKM18PVMK
RKM24PVMK
RKM28PVMK**

●Heat Pump

**RXM18PVMK
RXM24PVMK
RXM28PVMK**

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Note:

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

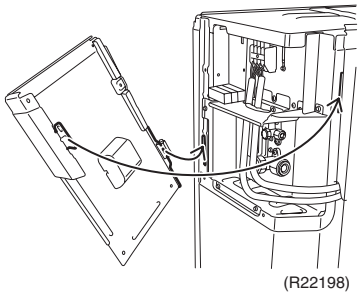
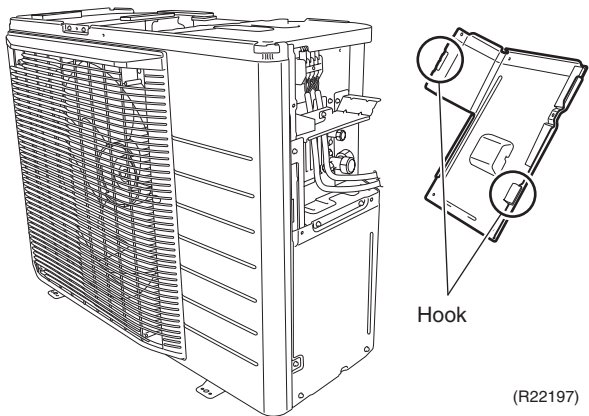
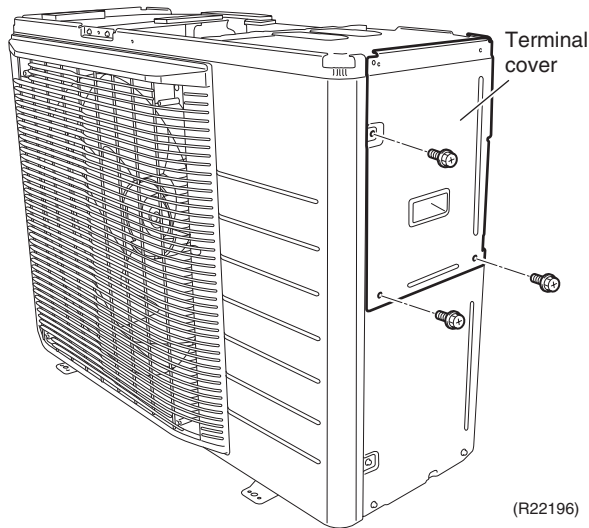
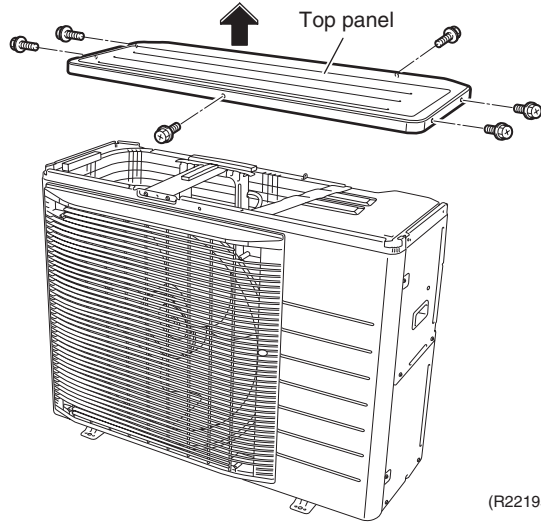
1. Outer Panels

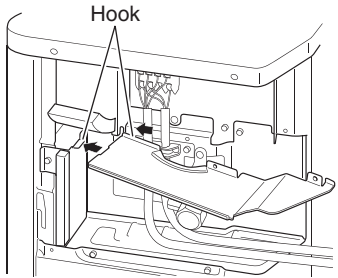
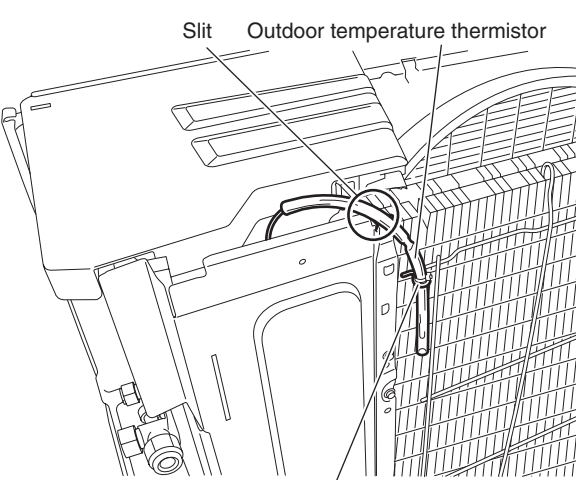
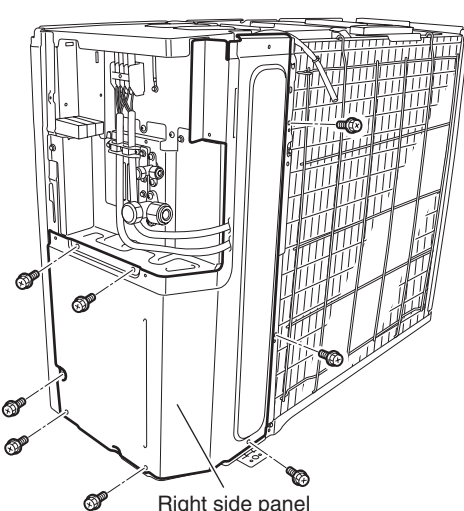


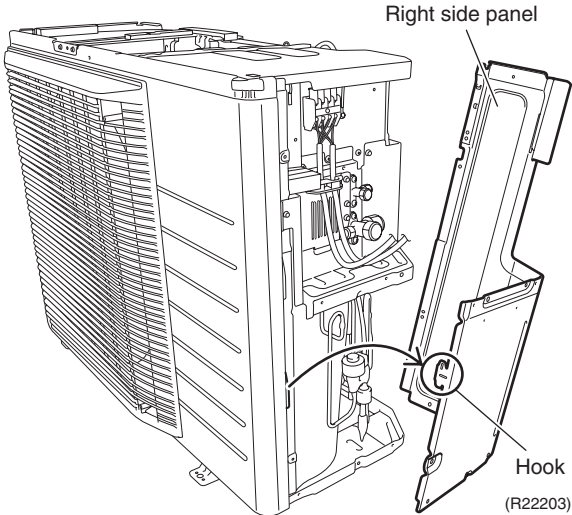
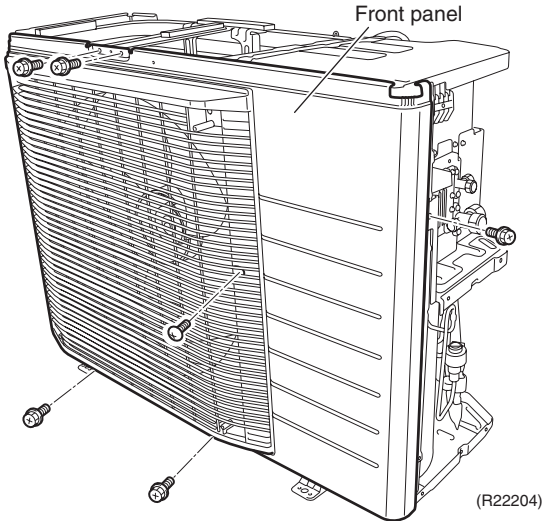
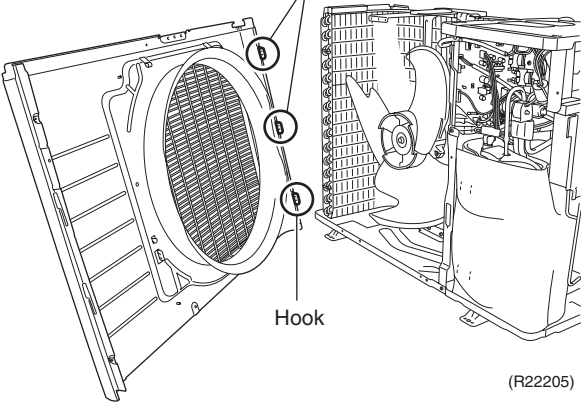
Warning

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

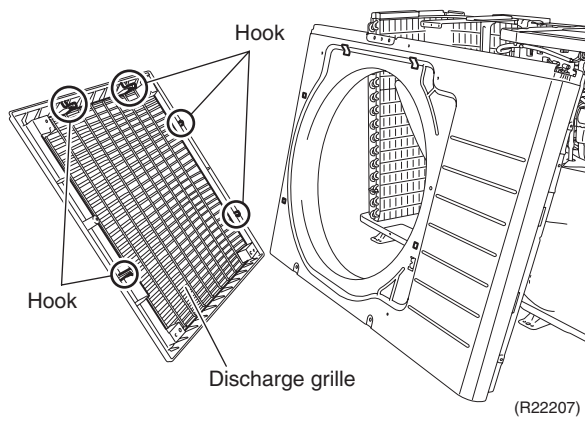
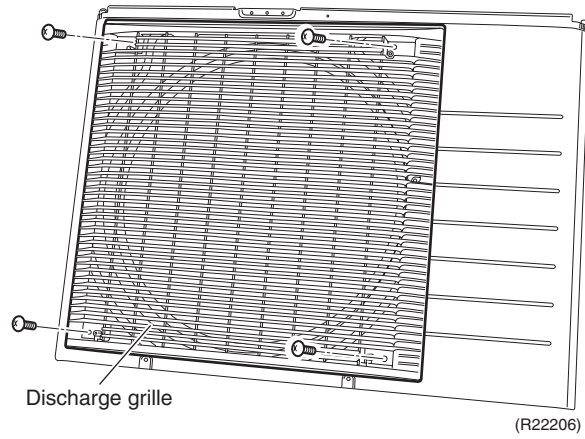
Step	Procedure	Points
1	Remove the 6 screws and remove the top panel.	(R22195)
2	Remove the 3 screws of the terminal cover.	(R22196)
3	Unfasten the 2 hooks and remove the terminal cover.	<p>■ When reassembling, make sure that the 2 hooks are securely fastened.</p>



Step	Procedure	Points
4	Remove the 2 screws.	<ul style="list-style-type: none"> When reassembling, slide the partition plate (2) to the left to securely fasten the 2 hooks.
5	Pull the partition plate (2) forward then slide to the right and remove it.	 <p>Hook</p> <p>(R22200)</p>
6	Release the outdoor temperature thermistor from the holder and the slit.	 <p>Slit Outdoor temperature thermistor</p> <p>Holder</p> <p>(R22201)</p>
7	Remove the 8 screws of the right side panel.	 <p>Right side panel</p> <p>(R22202)</p>

Step	Procedure	Points
8	Unfasten the hook and remove the right side panel.	 <p>Right side panel</p> <p>Hook (R22203)</p>
9	Remove the 6 screws of the front panel.	 <p>Front panel</p> <p>(R22204)</p>
10	Unfasten the 3 hooks on the left side.	<p>■ When reassembling, make sure that the 3 hooks are securely fastened.</p>
11	Remove the front panel.	 <p>Hook</p> <p>Hook</p> <p>(R22205)</p>

Step	Procedure	Points
12	Remove the 4 screws of the discharge grille.	
13	Unfasten the 5 hooks and remove the discharge grille.	

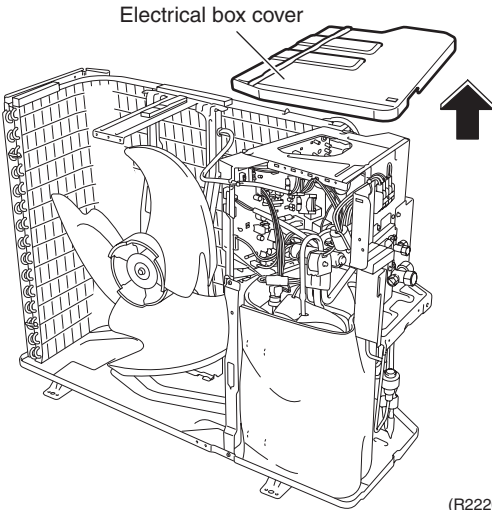
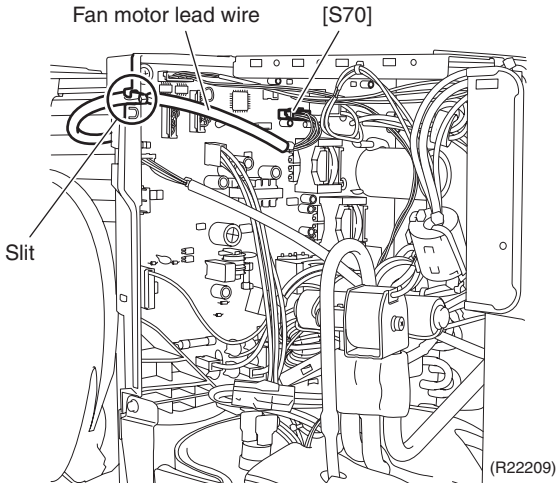
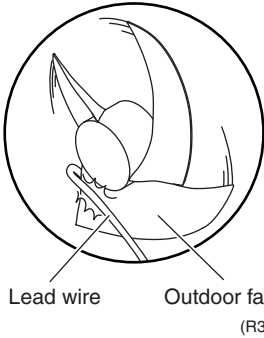
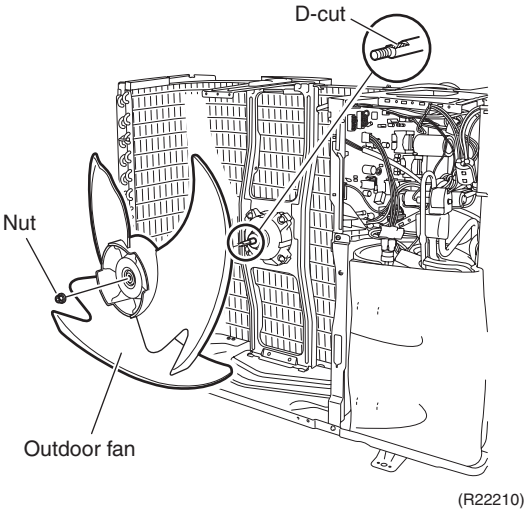
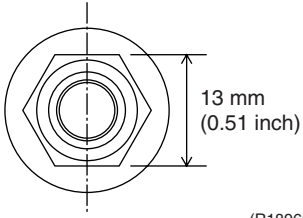


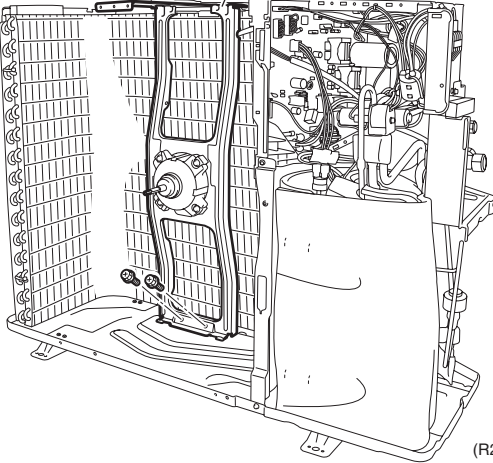
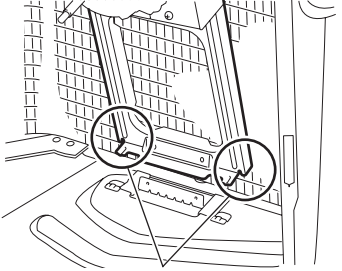
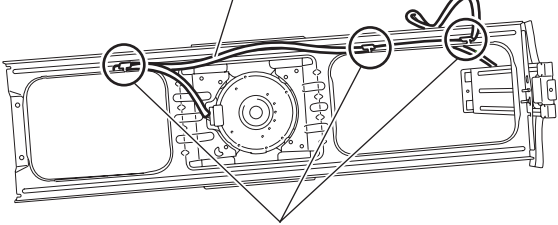
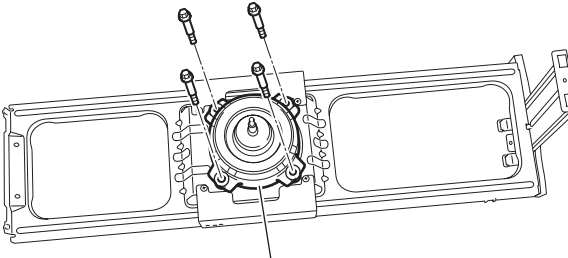
2. Outdoor Fan / Fan Motor



Warning

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

Step	Procedure	Points
<p>1 Remove the electrical box cover.</p>		
<p>2 Disconnect the connector [S70] and release the fan motor lead wire from the slit.</p>		<p>[S70]: fan motor</p> <ul style="list-style-type: none"> ■ 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>3 Remove the nut and remove the outdoor fan.</p>		<ul style="list-style-type: none"> ■ Nut size : M8  <ul style="list-style-type: none"> ■ When reassembling, align the ▼ mark of the fan rotor with the D-cut section of the motor shaft.

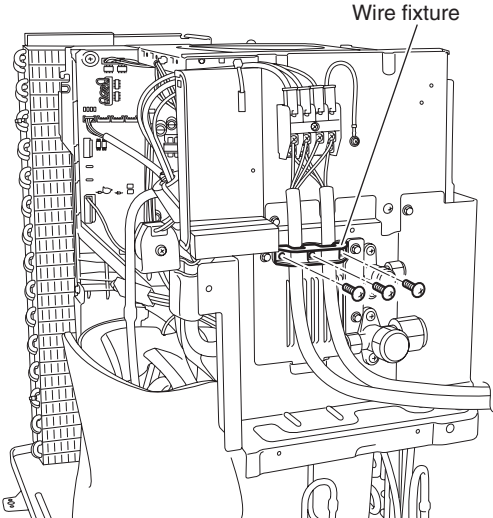
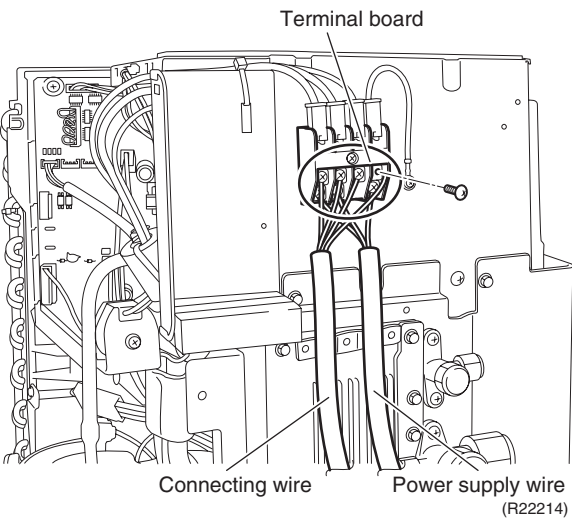
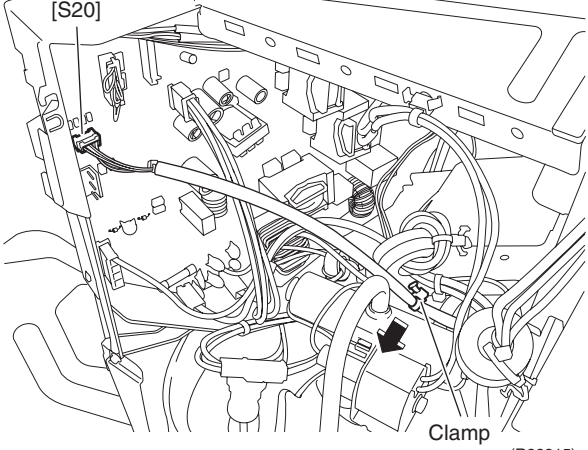
Step	Procedure	Points
4	Remove the 2 screws and remove the fan motor fixing frame.	<ul style="list-style-type: none"> ■ When reassembling, fit the 2 lower hooks into the bottom frame.
	<p style="text-align: center;">Fan motor fixing frame</p>  <p style="text-align: right;">(R22211)</p>	 <p style="text-align: center;">Hook (R22212)</p>
5	Unfasten the 3 hooks on the fan motor fixing frame and release the fan motor lead wire.	
	<p style="text-align: center;">Fan motor lead wire</p>  <p style="text-align: center;">Hook (R20917)</p>	
6	Remove the 4 screws and remove the fan motor.	
	 <p style="text-align: center;">Fan motor (R20918)</p>	

3. Electrical Box

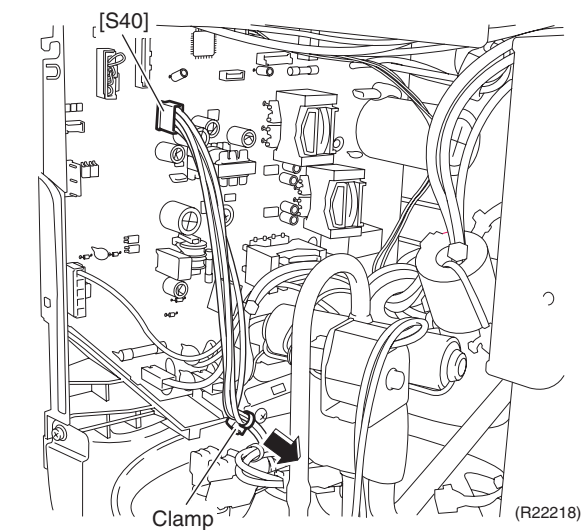
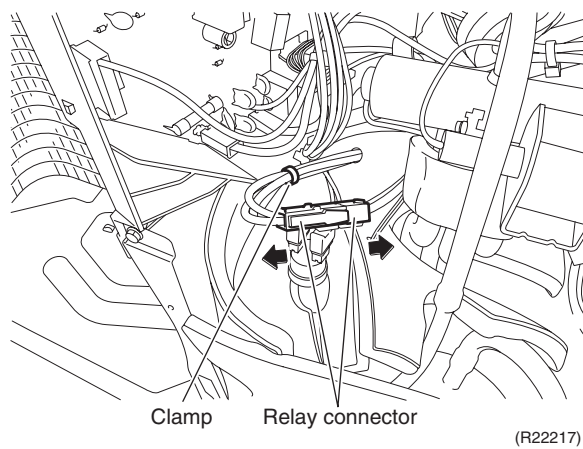
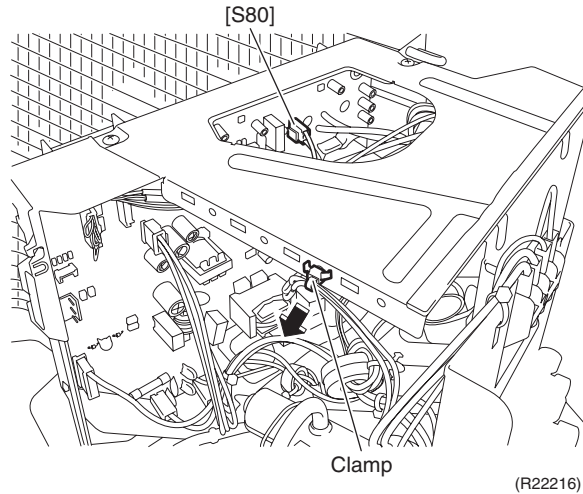


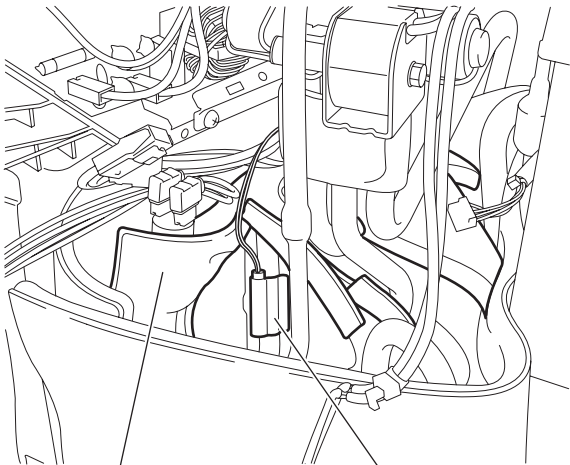
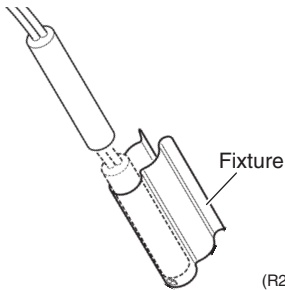
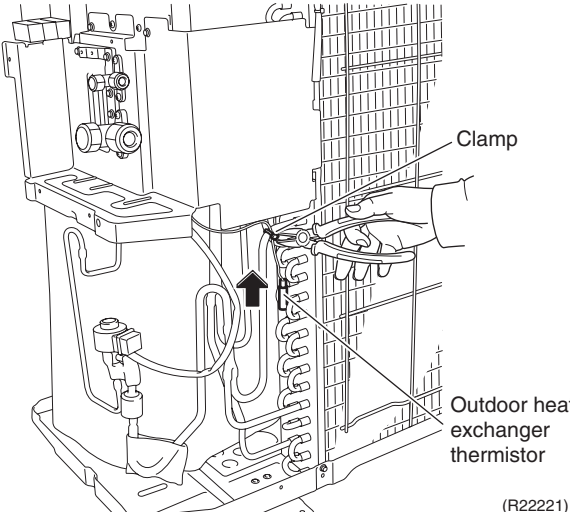
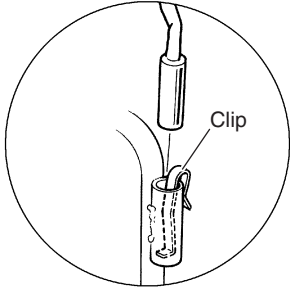
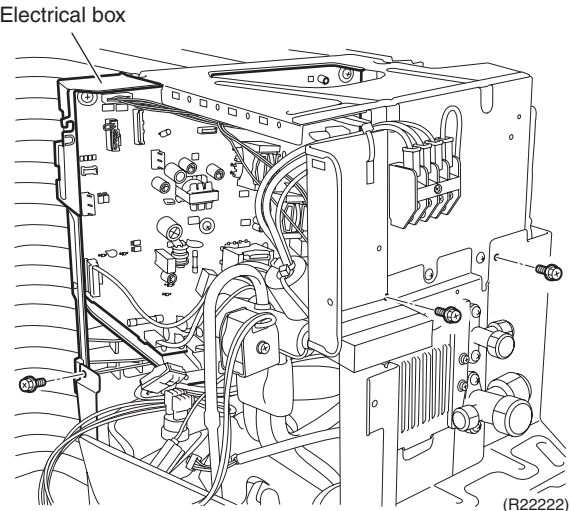
Warning

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Step	Procedure	Procedure	Points
1	Remove the 3 screws and remove the wire fixture.	 <p style="text-align: right;">(R22213)</p>	
2	Remove the 7 screws on the terminal board and disconnect the connecting wire and power supply wire.	 <p style="text-align: right;">(R22214)</p>	
3	Disconnect the connector [S20] and pull out the clamp.	 <p style="text-align: right;">(R22215)</p>	<p>[S20]: electronic expansion valve coil</p>

Step	Procedure	Points
4	Disconnect the connector [S80] and pull out the clamp.	<p>[S80]: four way valve coil</p> <ul style="list-style-type: none"> ■ The cooling only models have no harness for [S80].
5	Disconnect the relay connector for compressor and pull out the clamp.	
6	Disconnect the connector [S40] and pull out the clamp.	[S40]: overload protector



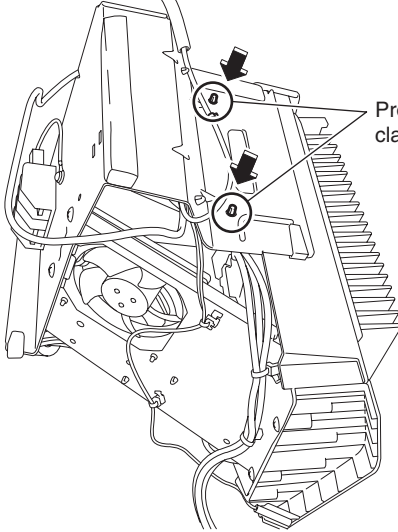
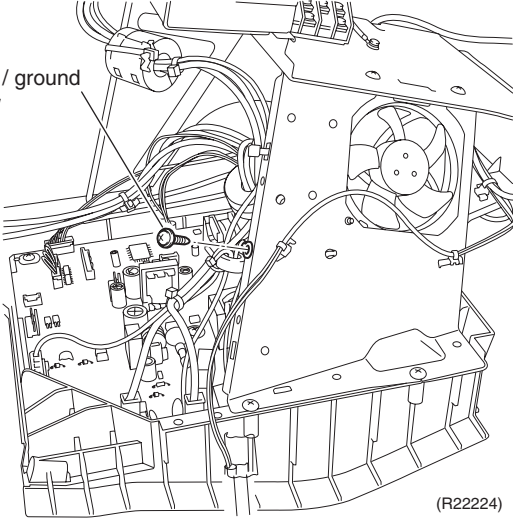
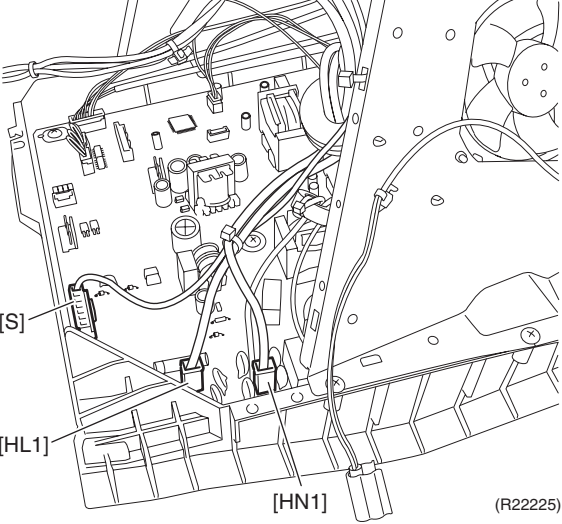
Step	Procedure	Points
7	Open the sound blanket (top) and detach the discharge pipe thermistor.	<ul style="list-style-type: none"> Be careful not to lose the fixture for the thermistor.
	 <p>Sound blanket (top) Discharge pipe thermistor (R22219)</p>	 <p>Fixture (R22220)</p>
8	Cut the clamp and pull out the outdoor heat exchanger thermistor.	<ul style="list-style-type: none"> Be careful not to lose the clip for the thermistor.
	 <p>Clamp Outdoor heat exchanger thermistor (R22221)</p>	 <p>Clip (R3264)</p>
9	Remove the 3 screws and remove the electrical box.	
	 <p>Electrical box (R22222)</p>	

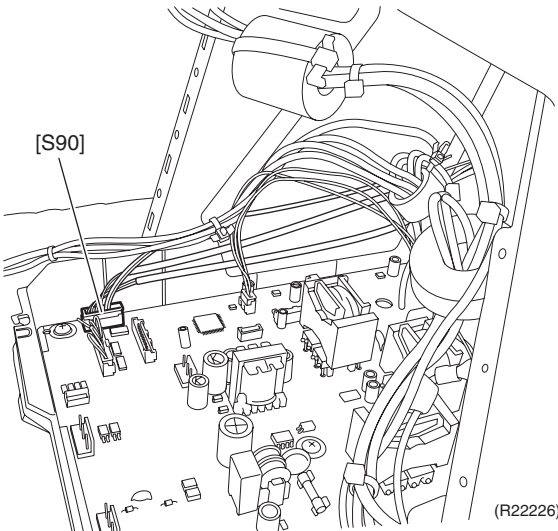
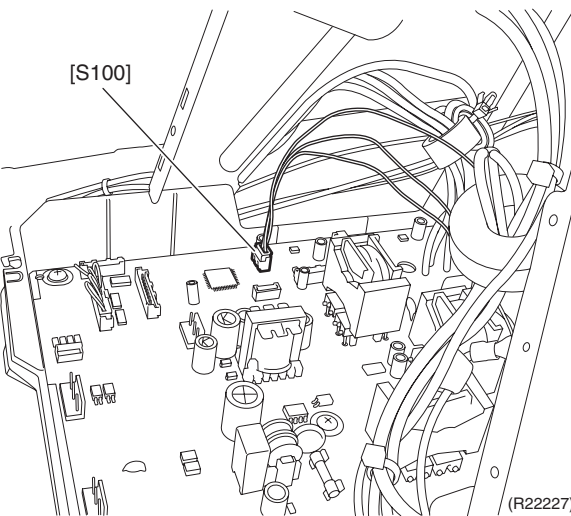
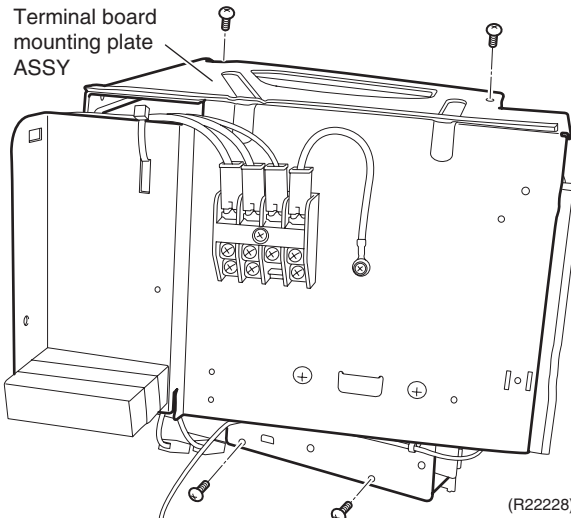
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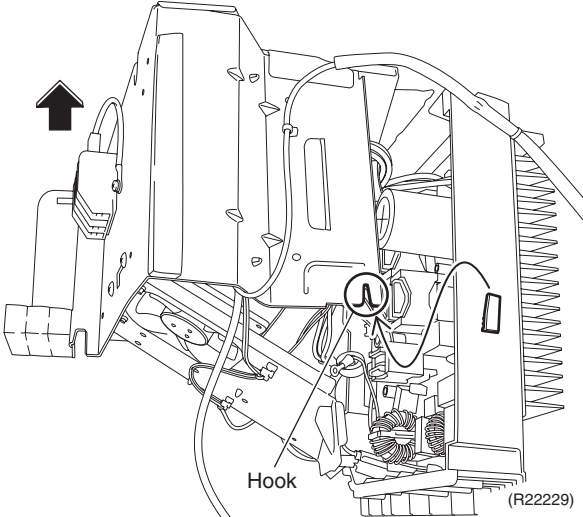
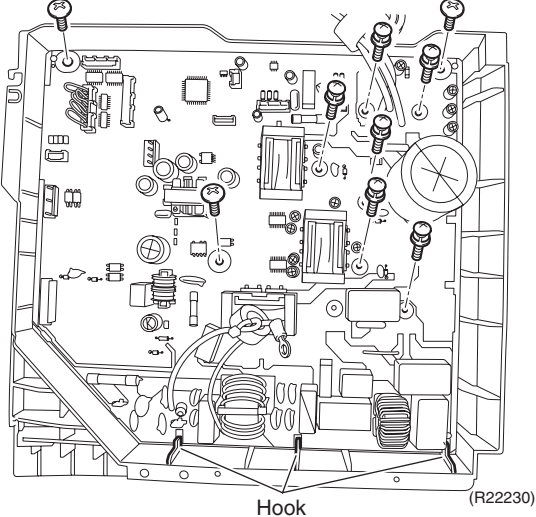
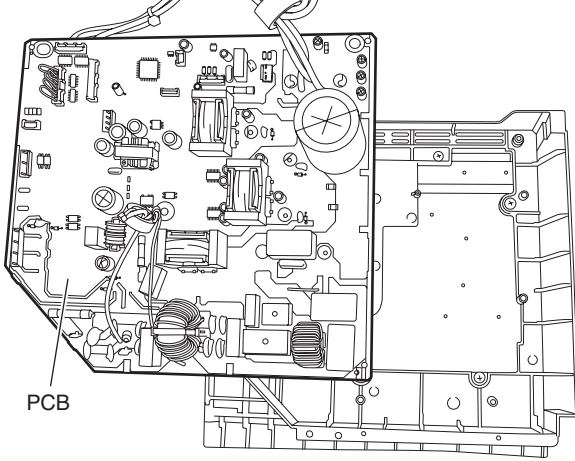


Warning

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Step	Procedure	Points
1. Remove the terminal board mounting plate ASSY.	 <p>Projection of clamp</p> <p>(R22223)</p>	
1 Push the 2 projections of the clamps from the back of the electrical box and pull them out.		
2 Remove the earth / ground screw.	 <p>Earth / ground screw</p> <p>(R22224)</p>	
3 Disconnect the 3 terminals for power supply.	 <p>[S]</p> <p>[HL1]</p> <p>[HN1]</p> <p>(R22225)</p>	<p>[HL1], [HN1], [S]: to terminal board</p>

Step	Procedure	Points
4	Disconnect the connector [S90].	[S90]: thermistors
	 <p>[S90]</p> <p>(R22226)</p>	
5	Disconnect the connector [S100].	[S100]: fan motor for cooling electrical box
	 <p>[S100]</p> <p>(R22227)</p>	
6	Remove the 4 screws of the terminal board mounting plate ASSY.	
	 <p>Terminal board mounting plate ASSY</p> <p>(R22228)</p>	

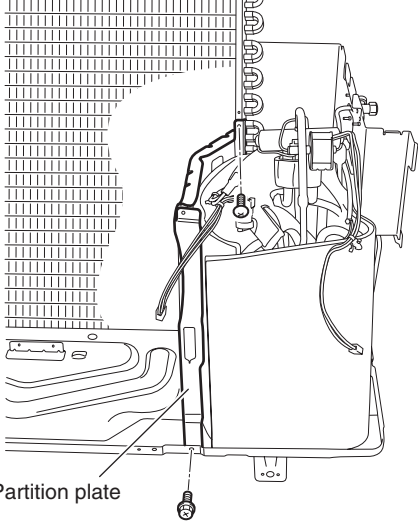
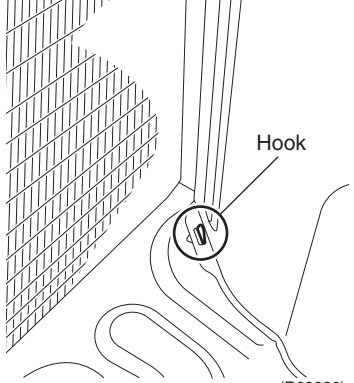
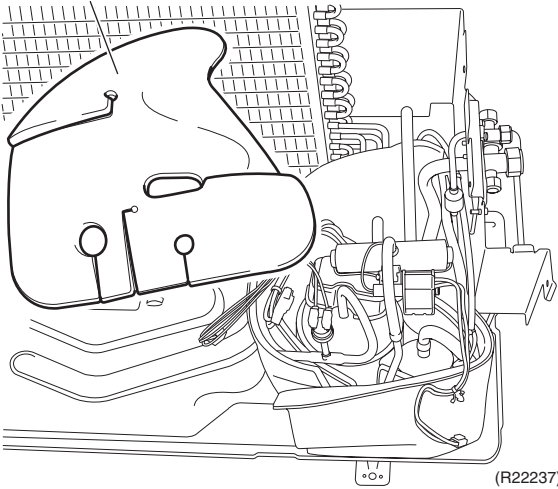
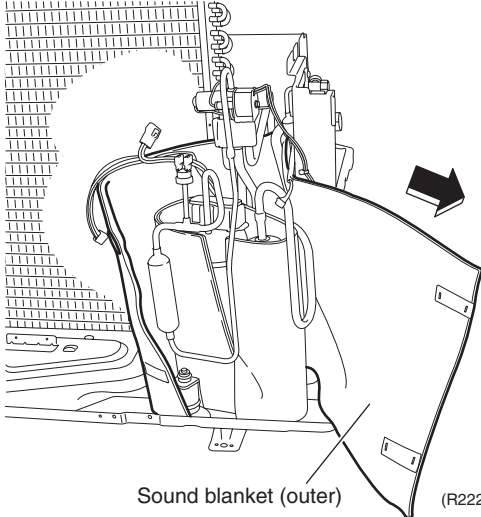
Step	Procedure	Points
7	Slide the terminal board mounting plate ASSY up to unfasten the hook and remove it.	<ul style="list-style-type: none"> ■ When reassembling, make sure to fasten the hook with the notch.
<p>2. Remove the PCB.</p> <p>1 Remove the 9 screws of the PCB.</p> <p>2 Unfasten the 3 hooks and remove the PCB.</p>	  	

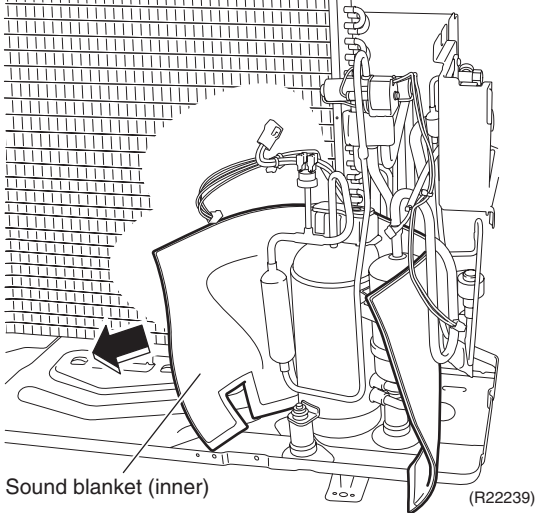
6. Partition Plate / Sound Blankets



Warning

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

Step	Procedure	Points
<p>1. Remove the partition plate.</p> <p>1 Remove the 2 screws.</p> <p>2 Lift up the partition plate and remove it.</p>	 <p>Partition plate</p> <p>(R22235)</p>	<ul style="list-style-type: none"> ■ When reassembling, fit the lower hook into the bottom frame.  <p>Hook</p> <p>(R22236)</p>
<p>2. Remove the sound blankets.</p> <p>1 Remove the sound blanket (top).</p> <p>2 Open and pull out the sound blanket (outer).</p>	<p>Sound blanket (top)</p>  <p>(R22237)</p>  <p>Sound blanket (outer)</p> <p>(R22238)</p>	<ul style="list-style-type: none"> ■ Since piping ports are torn easily, remove the sound blanket carefully.

Step	Procedure	Points
3	Remove the sound blanket (inner).	
 <p>The diagram shows a side view of a mechanical assembly, likely a vehicle's interior partition. A large, curved, textured surface, identified as the 'inner sound blanket', is being shown being removed. A black arrow points to the bottom edge of this blanket, indicating the direction of removal. The assembly includes various components like pipes, hoses, and structural frames. The drawing is a line-art style technical illustration.</p> <p>Sound blanket (inner) (R22239)</p>		

7. Electronic Expansion Valve Coil / High Pressure Switch / 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

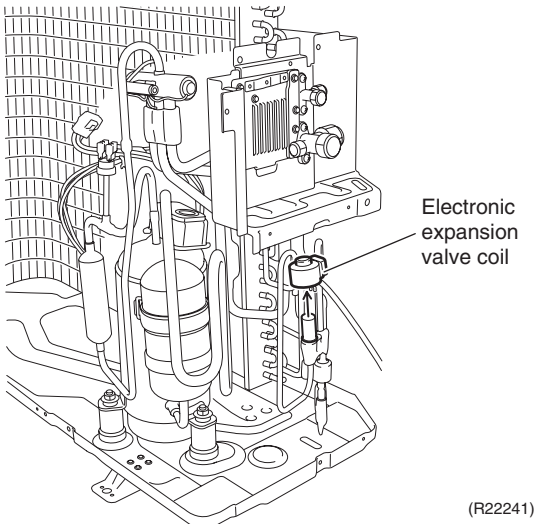
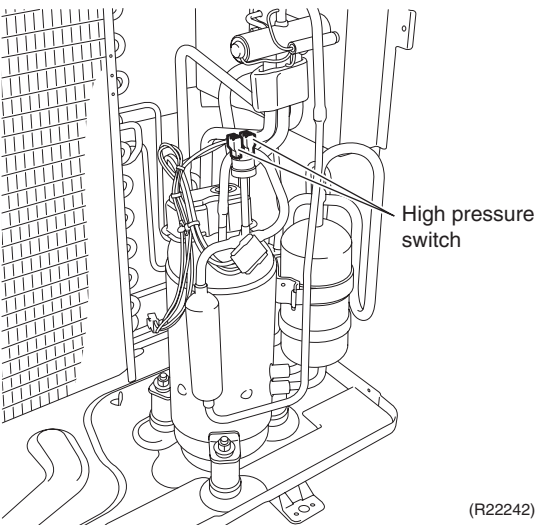
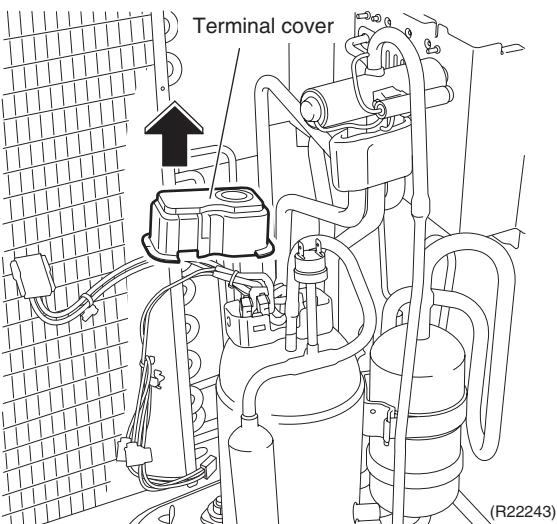
- ♦ From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.
- ♦ Cautions for restoration
 1. Restore the piping by non-oxidation brazing.
 2. It is required to prevent the carbonization of the oil inside 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.



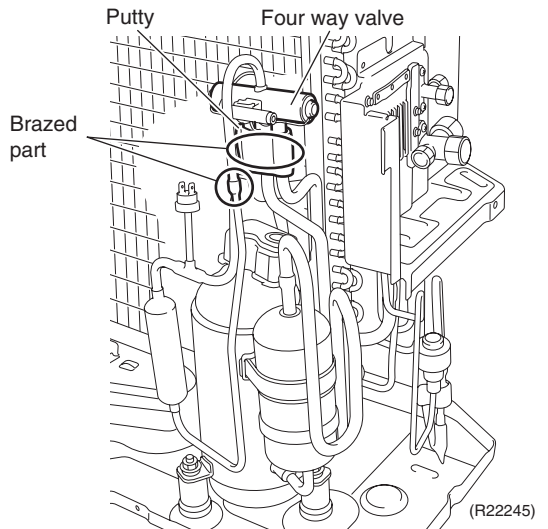
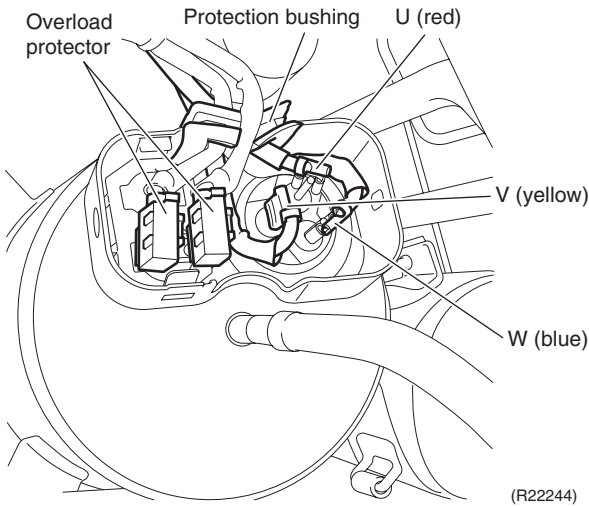
Note

- ♦ 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	Remove the screw and remove the four way valve coil.	<div data-bbox="539 1384 1029 1908" style="text-align: center;"> <p>(R22240)</p> </div> <div data-bbox="1088 1370 1461 2116"> <p>■ The cooling only models have no four way valve.</p> </div>

Step	Procedure	Points
2	Pull out the electronic expansion valve coil.	
	 <p>Electronic expansion valve coil</p> <p>(R22241)</p>	
3	Pull out the high pressure switch.	
	 <p>High pressure switch</p> <p>(R22242)</p>	
4	Remove the terminal cover.	
	 <p>Terminal cover</p> <p>(R22243)</p>	

Step	Procedure	Points
5	Remove the protection bushing.	
6	Disconnect the compressor lead wires and the overload protector.	
7	Remove the putty.	
8	Heat up the 4 brazed parts and remove the four way 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.

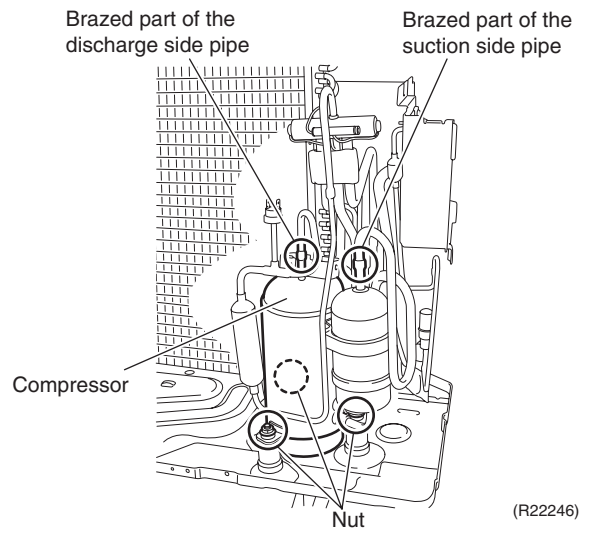
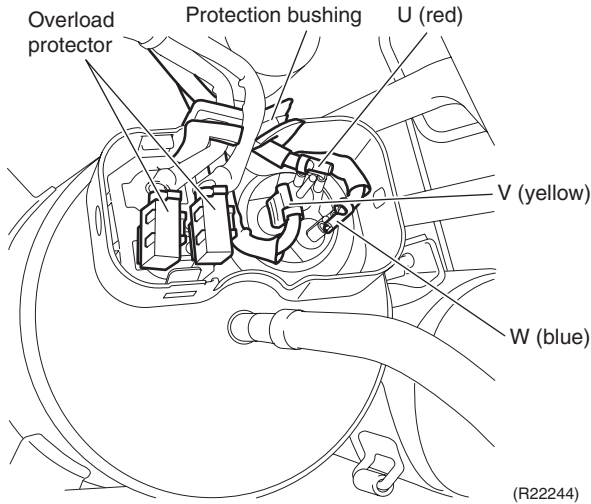


Note

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- ◆ 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
<p>1 Remove the terminal cover.</p>		

Step	Procedure	Points
2	Remove the protection bushing.	
3	Disconnect the compressor lead wires and the overload protector.	
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.	
7	Lift up the compressor and remove it.	



Revision History

Month / Year	Version	Revised contents
09 / 2015	Si001559E	First edition

Warning



- Daikin products are manufactured for export to numerous countries throughout the world. Prior to purchase, please confirm with your local authorised importer, distributor and/or retailer whether this product conforms to the applicable standards, and is suitable for use, in the region where the product will be used. This statement does not purport to exclude, restrict or modify the application of any local legislation.
- Ask a qualified installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Use only those parts and accessories supplied or specified by Daikin. Ask a qualified installer or contractor to install those parts and accessories. Use of unauthorised parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Read the user's manual carefully before using this product. The user's manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

If you have any enquiries, please contact your local importer, distributor and/or retailer.

Cautions on product corrosion

1. Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced.
2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided. If you need to install the outdoor unit close to the sea shore, contact your local distributor.

Dealer

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