


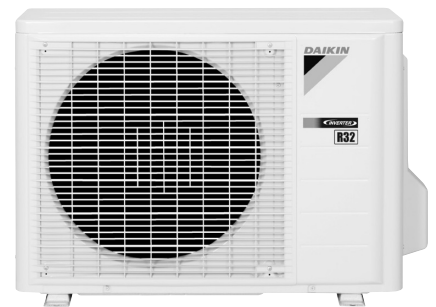
REMOVAL PROCEDURE



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

2.0/2.5/3.5 kW Class

-  Outdoor Unit
-  Inverter
-  Pair Type



Service Manual Removal Procedure

Outdoor Unit

●Cooling Only

**RKM20PVMA
RKM25PVMA
RKM35PVMA**

●Heat Pump

**RXJ25PVMA
RXJ35PVMA**

**RXM20PVMA
RXM25PVMA
RXM35PVMA**

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Note:

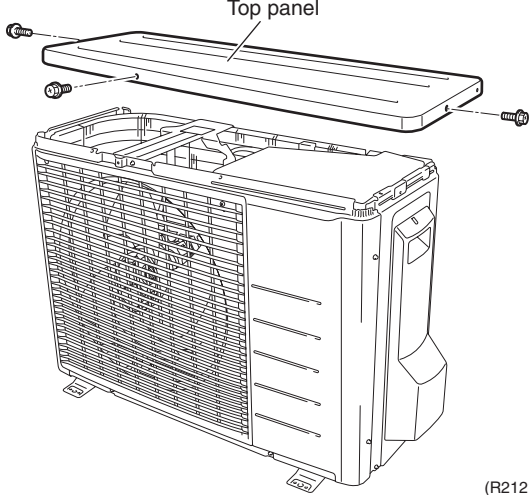
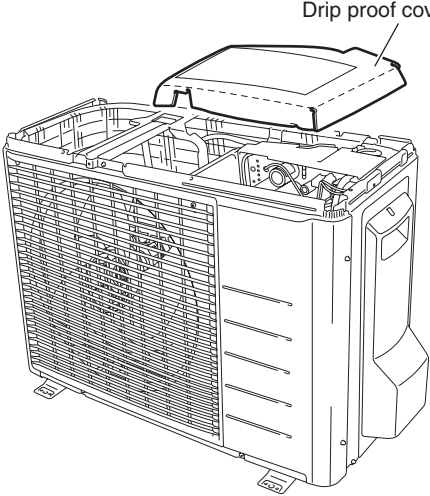
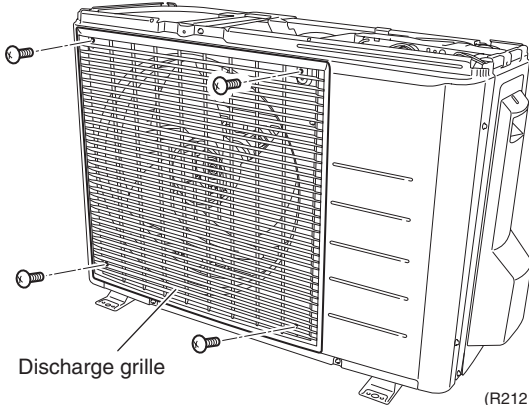
- The illustrations may be slightly different depending on the model.
- The illustrations are for heat pump models as representative.

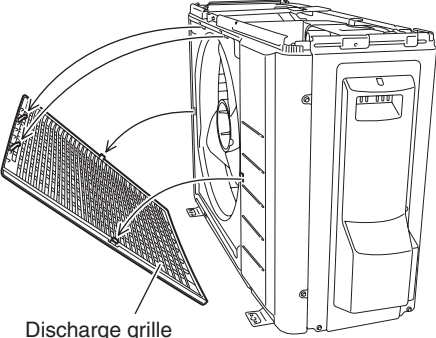
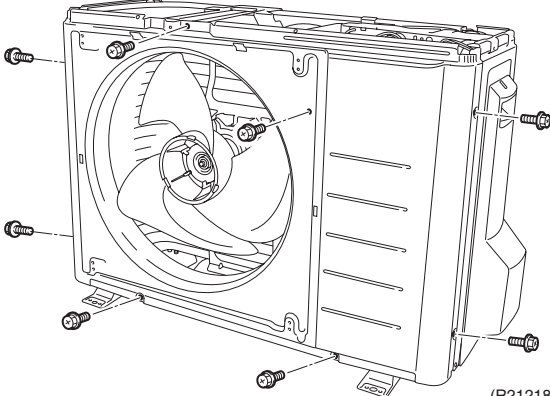
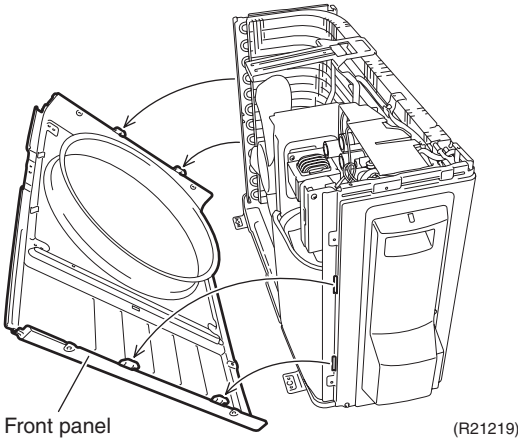
1. Outer Panels



Warning

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

Step	Procedure	Points	Points
1	Remove the 3 screws and remove the top panel.	 <p>(R21214)</p>	
2	Remove the drip proof cover.	 <p>(R21215)</p>	
3	Remove the 4 screws of the discharge grille.	 <p>(R21216)</p>	

Step	Procedure	Points
4	Unfasten the 4 hooks and remove the discharge grille.	(R21217)
5	Remove the 8 screws of the front panel.	(R21218)
6	Unfasten the 4 hooks and remove the front panel.	<ul style="list-style-type: none"> ■ When reassembling, make sure to fit the 4 hooks.
	 <p>Discharge grille</p>	
		
	 <p>Front panel</p>	

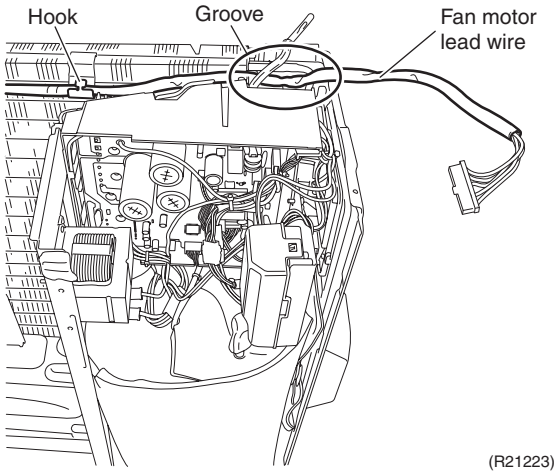
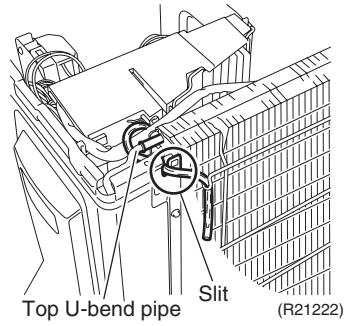
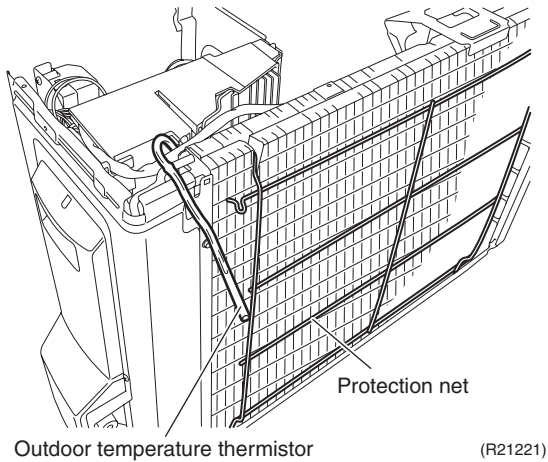
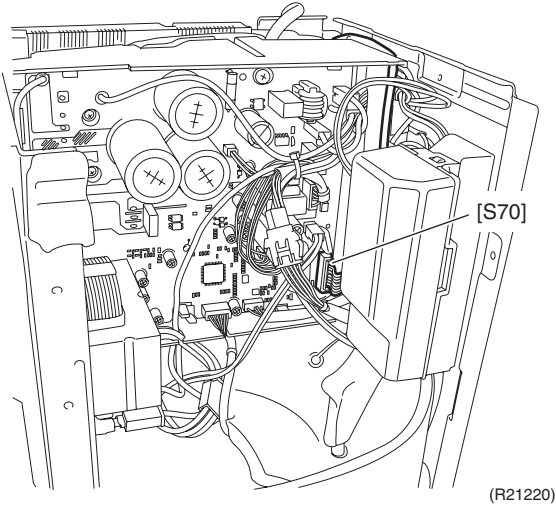
2. Outdoor Fan / Fan Motor

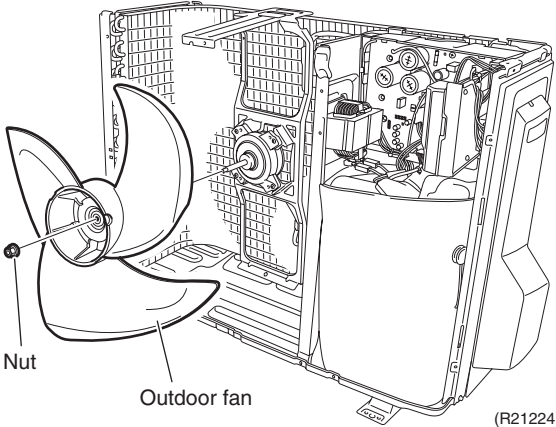
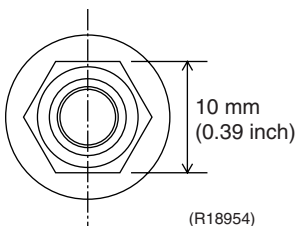
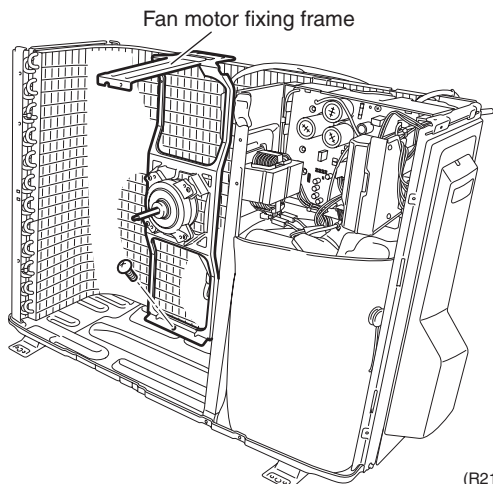
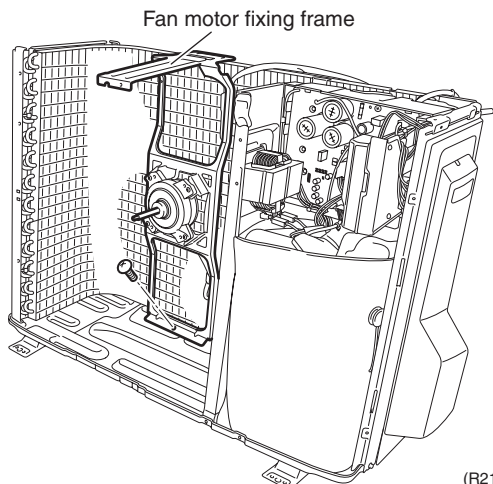
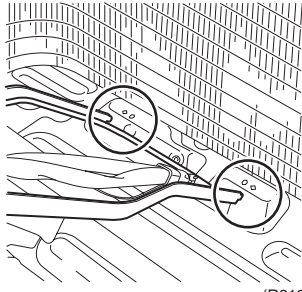
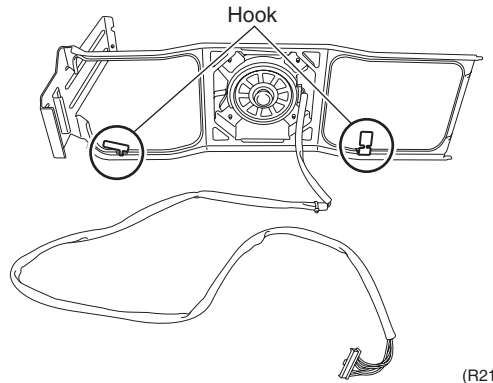
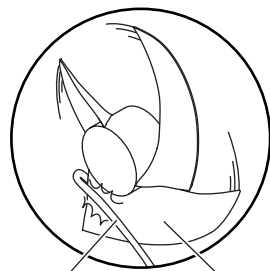
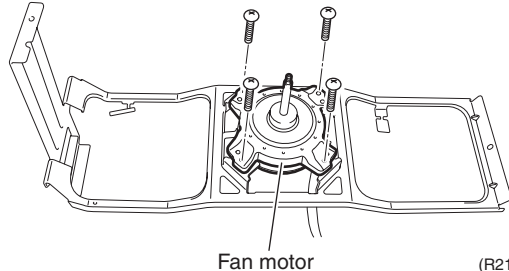


Warning

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Step	Procedure	Points
1	Disconnect the connector [S70].	[S70]: fan motor
2	Release the outdoor temperature thermistor from the protection net and pull out from the top U-bend pipe of outdoor heat exchanger.	<ul style="list-style-type: none"> ■ When reassembling, make sure to pass the outdoor temperature thermistor through the top U-bend pipe and the slit, then fix it at the holder.
3	Release the fan motor lead wire from the groove and the hook.	



Step	Procedure	Procedure	Points
4	Remove the nut of the outdoor fan.		
5	Remove the outdoor fan.		<p>■ Nut size: M6</p> 
6	Remove the screw and remove the fan motor fixing frame.		<p>■ When reassembling, align the ▼ mark of the outdoor fan with the D-cut section of the motor shaft.</p>
7	Remove the screw and release the fan motor lead wire from the 2 hooks.		<p>■ When reassembling, fit the lower 2 hooks into the bottom frame.</p> 
8	Release the fan motor lead wire from the 2 hooks.		<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> 
8	Remove the 4 screws and remove the fan motor.		

3. Electrical Box

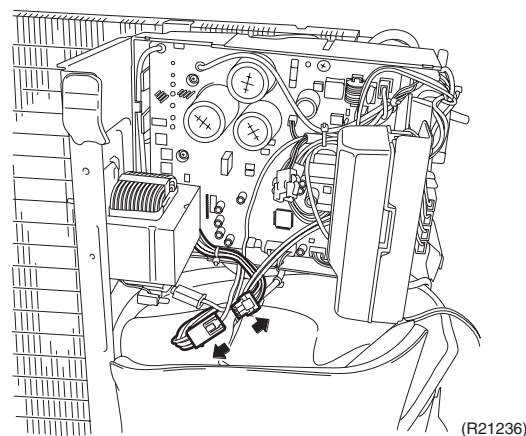
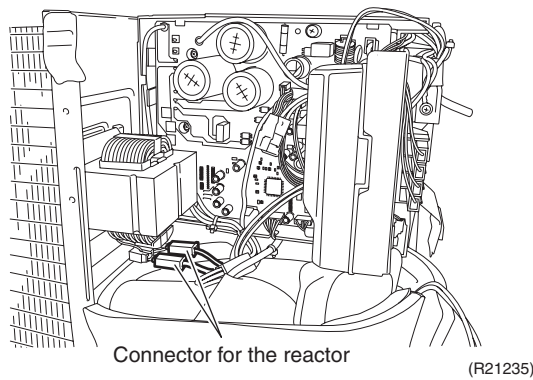
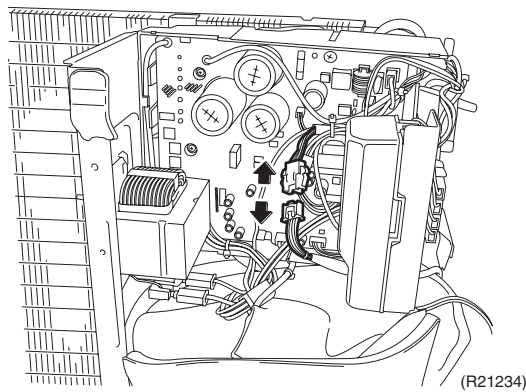
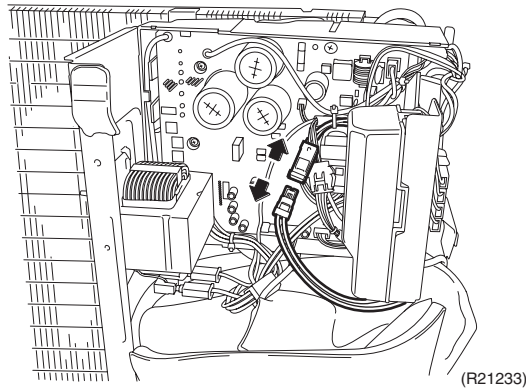


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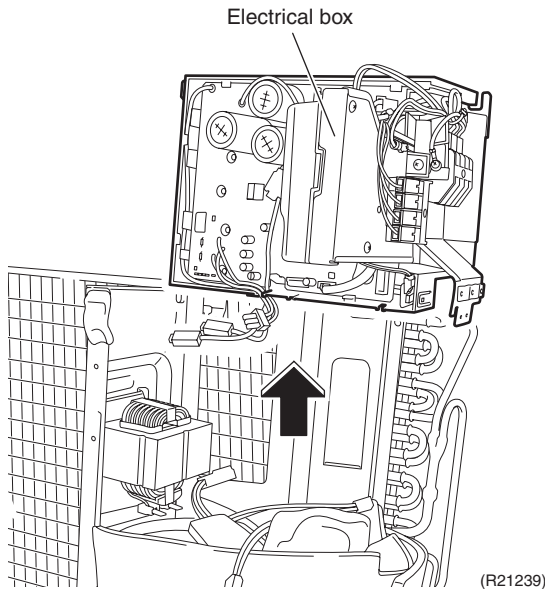
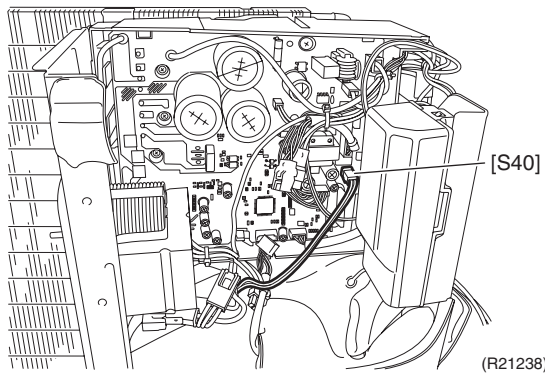
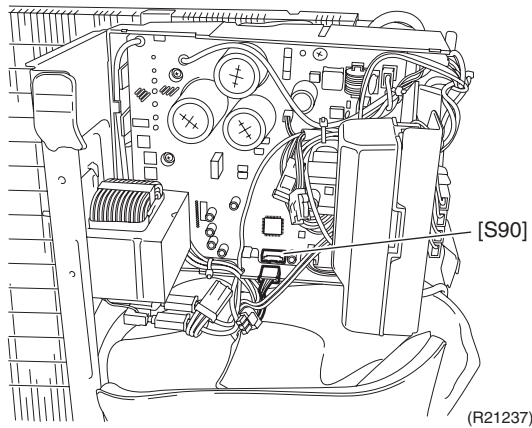
◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1. Remove the right side panel.	<p>Stop valve cover (R21229)</p>	<p>■ When reassembling, make sure to fit the 5 hooks.</p> <p>(R21230)</p>
1 Remove the screw.		
2 Slide the stop valve cover downward and remove it.		
3 Remove the 3 screws and remove the wire fixture.	<p>Terminal board Wire fixture Demand communication wire Connecting wire Power supply wire (R21231)</p>	<p>■ When reassembling, fasten the demand communication wire with the clamp to the wire fixture.</p> <p>Clamp (R21256)</p>
4 Remove the 7 screws on the terminal board and detach the connecting wire and the power supply wire.		
5 Remove the 4 screws and detach the demand communication wire.		
6 Remove the 7 screws and remove the right side panel.	<p>Right side panel (R21232)</p>	

Step	Procedure	Points
2.	Remove the electrical box.	
1	Disconnect the relay connector for four way valve coil.	<ul style="list-style-type: none"> ■ The cooling only models have no harness for four way valve coil.
2	Disconnect the relay connector for electronic expansion valve coil.	<ul style="list-style-type: none"> ■ The cooling only models have no relay connector for electronic expansion valve coil, disconnect the connector [S20] instead.
3	Disconnect the connectors for the reactor.	
4	Disconnect the relay connector for compressor.	



Step	Procedure	Points
5	Disconnect the connector [S90].	[S90]: thermistors
6	Disconnect the connector [S40].	[S40]: overload protector
7	Lift up the electrical box and remove it.	<ul style="list-style-type: none"> ■ When reassembling, connect the connectors in the reverse order.

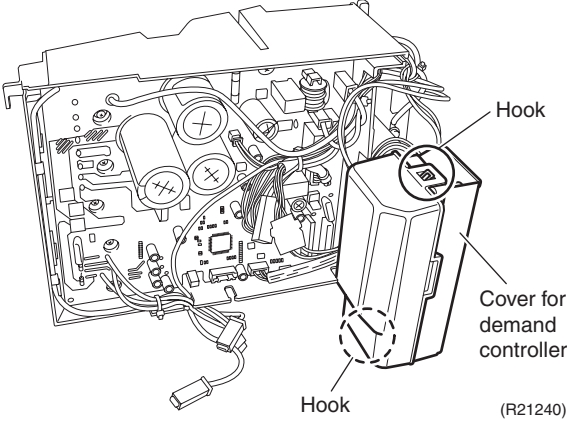
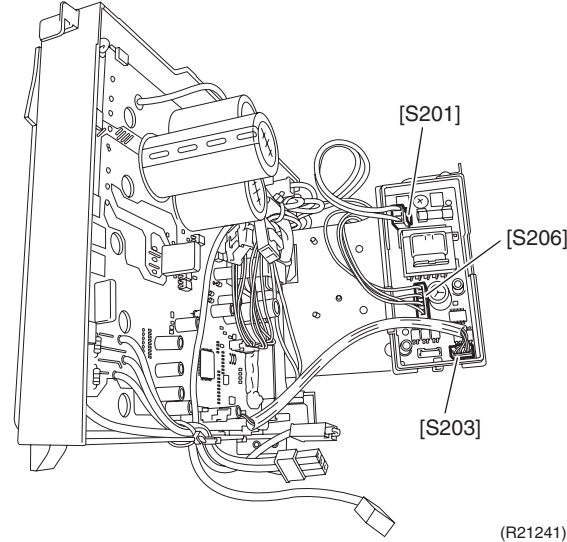
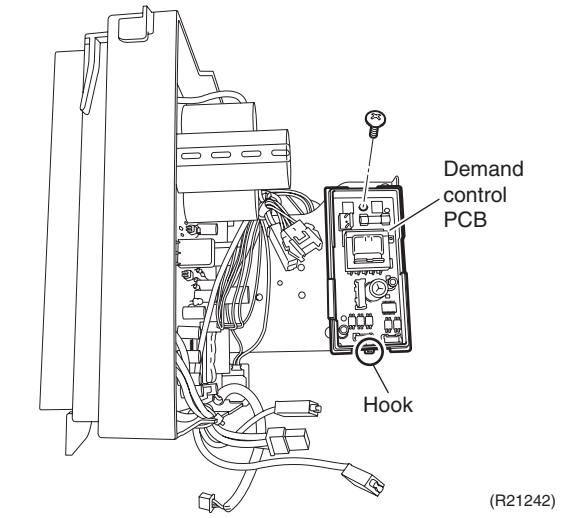


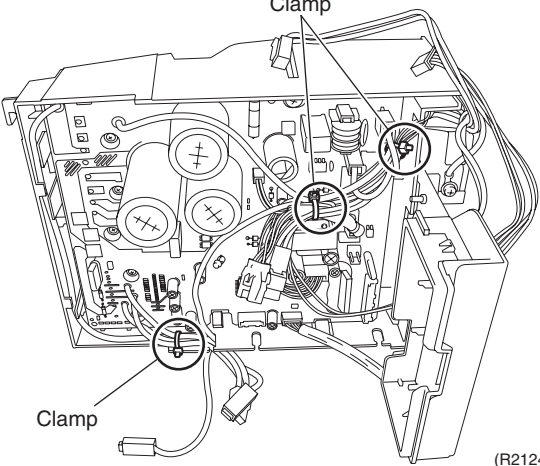
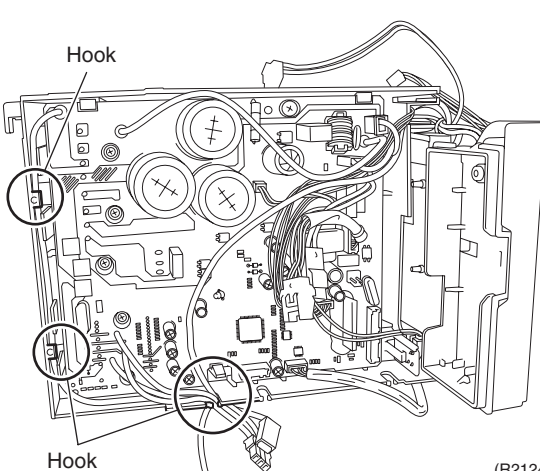
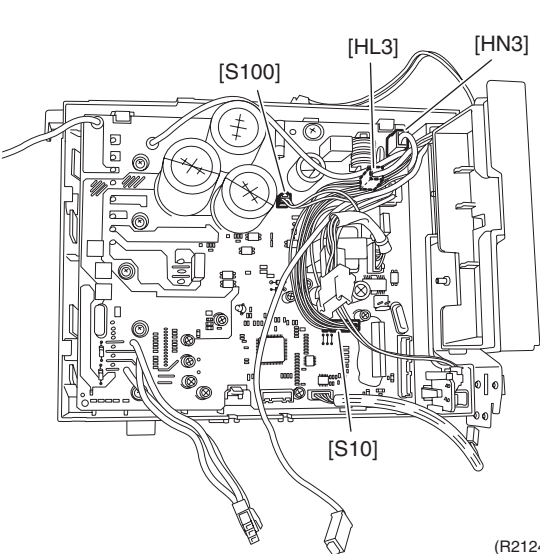
4. PCBs



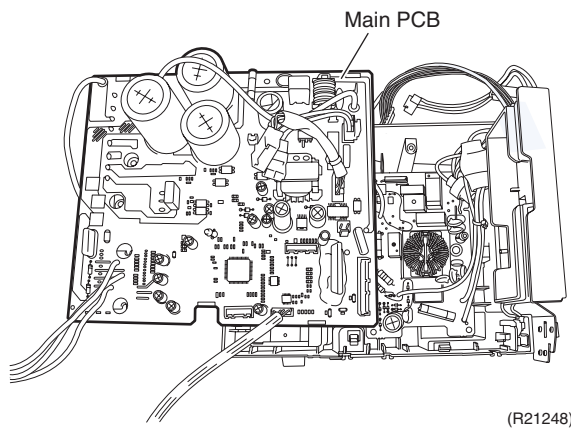
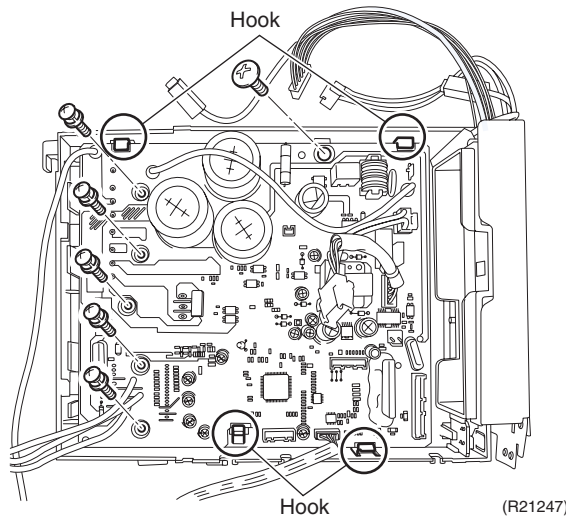
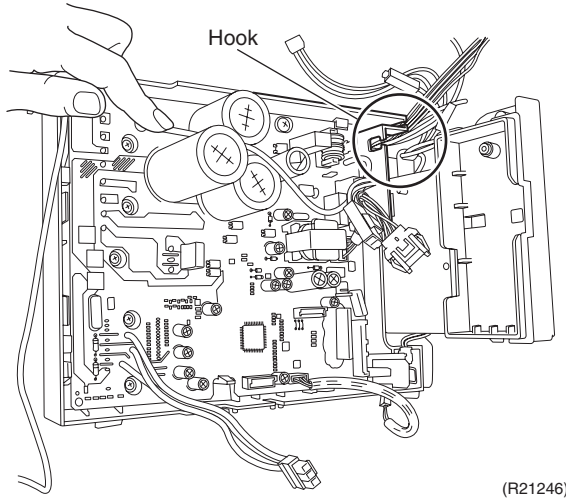
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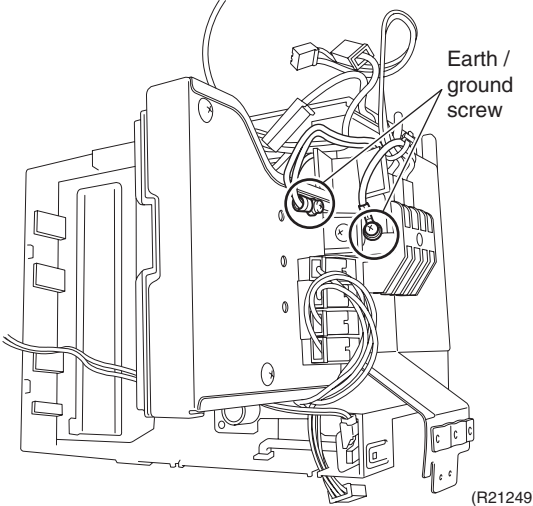
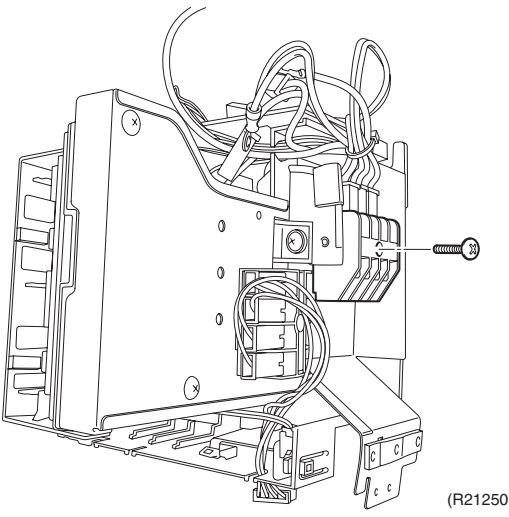
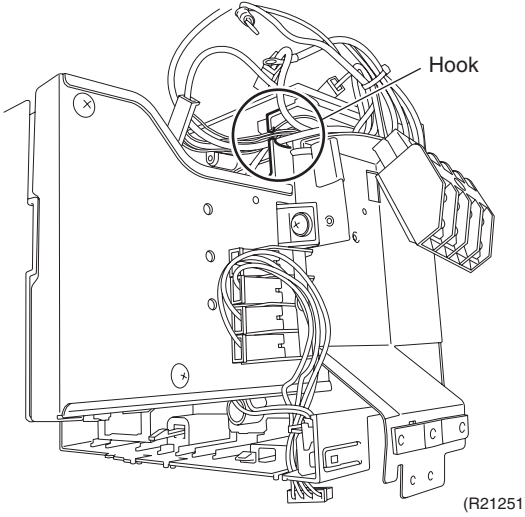
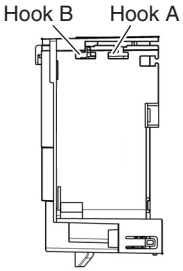
- ◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

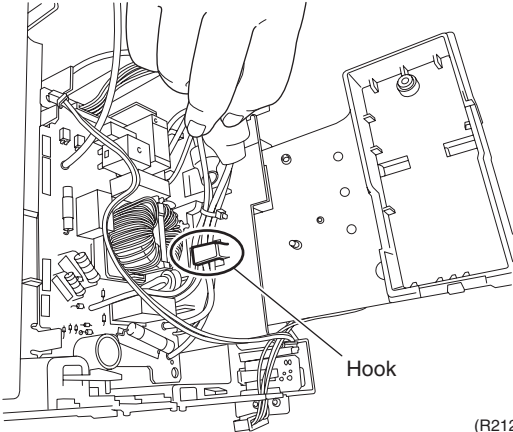
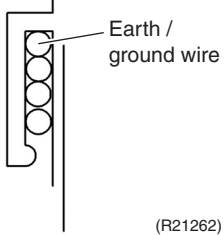
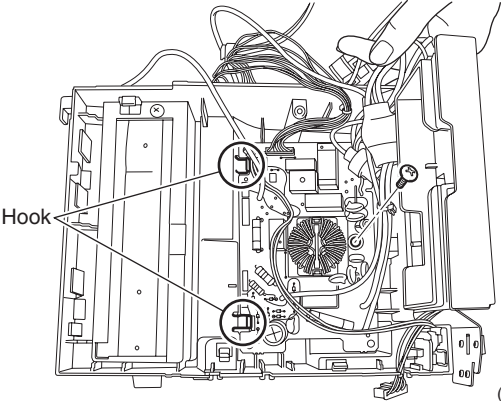
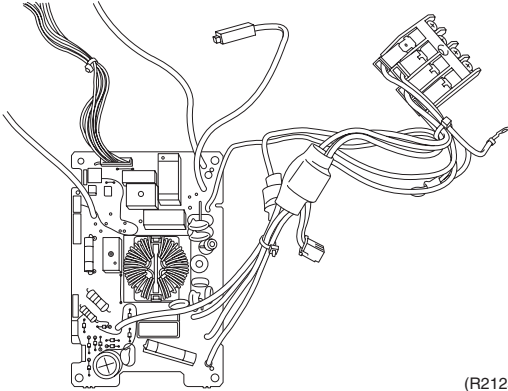
Step	Procedure	Points
1. Remove the demand control PCB.		<ul style="list-style-type: none"> ■ The demand controller is an optional accessory for cooling only models.
1 Unfasten the 2 hooks of the cover for the demand controller and remove it.		<ul style="list-style-type: none"> ■ The demand controller as an optional accessory has [S204] and [S205] instead of [S206]. <p>[S201]: terminal board [S203]: main PCB [S206] or [S204][S205]: smart meter</p>
2 Disconnect the connectors [S201], [S203], [S206].		<ul style="list-style-type: none"> ■ When reassembling, make sure to fit the hook on the bottom of the demand control PCB.
3 Remove the screw and remove the demand control PCB.		

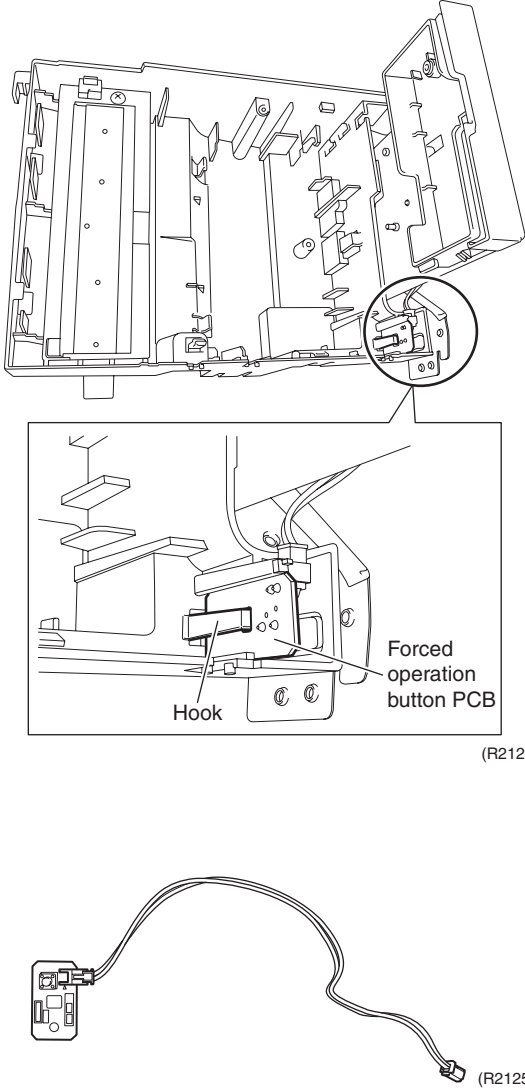
Step	Procedure	Points
2.	Remove the main PCB.	
1	<p>Cut the 3 clamps.</p>  <p>(R21243)</p>	
2	<p>Release the wires from the 3 hooks.</p>  <p>(R21244)</p>	
3	<p>Disconnect the connectors [S100], [S10], [HL3], [HN3].</p>  <p>(R21245)</p>	<p>[S100]: forced operation button PCB [S10][HL3][HN3]: filter PCB</p>

Step	Procedure	Points
4	Release the wires from the hook.	
5	Remove the 6 screws.	
6	Unfasten the 4 hooks and remove the main PCB.	



Step	Procedure	Points
3. Remove the filter PCB.		
1	<p>Remove the 2 screws and detach the earth / ground wires.</p>  <p>(R21249)</p>	
2	<p>Remove the screw and remove the terminal board.</p>  <p>(R21250)</p>	
3	<p>Release the wires from the 2 hooks.</p>  <p>(R21251)</p>	<p>■ Inside view</p>  <p>(R21261)</p> <p>Hook A:</p> <ul style="list-style-type: none"> • Harnesses connecting the main PCB and the filter PCB (blue, orange, white, black) • Reactor harness (brown) <p>Hook B:</p> <ul style="list-style-type: none"> • Harnesses for terminal board (black, white, red) • Earth / ground harness (green)

Step	Procedure	Points
4	Release the wires from the hook.  <p style="text-align: right;">(R21252)</p>	<ul style="list-style-type: none"> ■ When reassembling, make sure to insert the earth / ground wire first.  <p style="text-align: right;">(R21262)</p>
5	Remove the screw.	
6	Unfasten the 2 hooks and remove the filter PCB.  <p style="text-align: right;">(R21253)</p>	
	 <p style="text-align: right;">(R21254)</p>	

Step	Procedure	Points
4.	Remove the forced operation button PCB.	
1	<p data-bbox="199 286 448 412">Unfasten the hook on the back and remove the forced operation button PCB.</p>  <p data-bbox="997 974 1069 996">(R21255)</p> <p data-bbox="997 1299 1069 1321">(R21257)</p>	

5. Thermistor ASSY



Warning

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Step	Procedure	Points
1 Slightly open the sound blanket (top). 2 Release the discharge pipe thermistor.	<p>Sound blanket (top)</p> <p>Discharge pipe thermistor</p> <p>(R21258)</p>	<ul style="list-style-type: none"> ■ Be careful not to lose the fixture for the thermistor. <p>Fixture</p> <p>(R21275)</p>
3 Cut the clamp. 4 Pull out the outdoor heat exchanger thermistor and remove the thermistor ASSY.	<p>Clamp</p> <p>Outdoor heat exchanger thermistor</p> <p>(R21259)</p>	<ul style="list-style-type: none"> ■ Be careful not to lose the clip for the thermistor. <p>Clip</p> <p>(R3264)</p>
	<p>Thermistor ASSY</p> <p>(R21260)</p>	

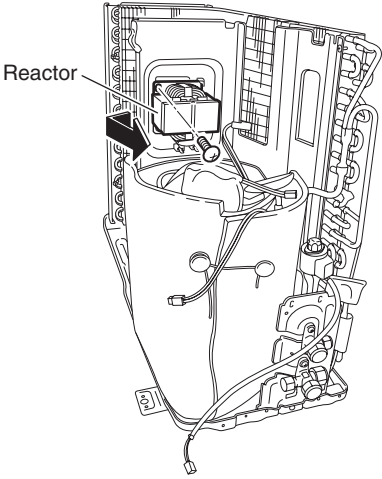
6. Reactor / Partition Plate



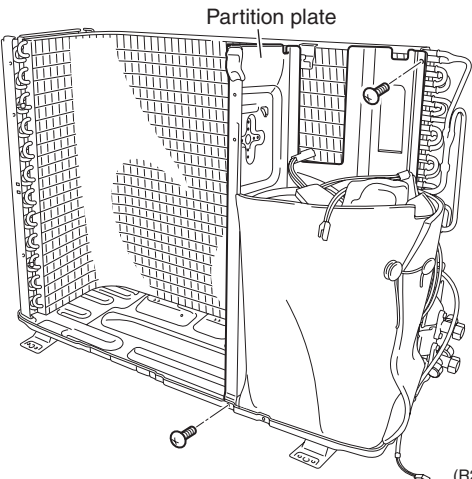
Warning

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Step	Procedure	Points
1	Remove the screw.	
2	Slide the reactor to the left and remove it.	
3	Remove the 2 screws and remove the partition plate.	

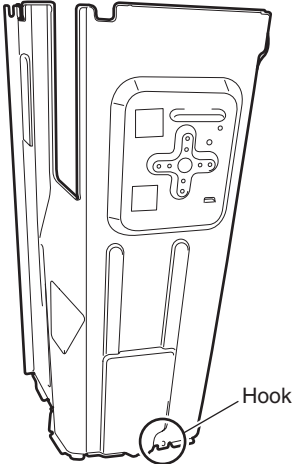


(R21263)



(R21264)

■ Heat exchanger side view



(R21265)

■ When reassembling, fit the lower hook into the bottom frame.

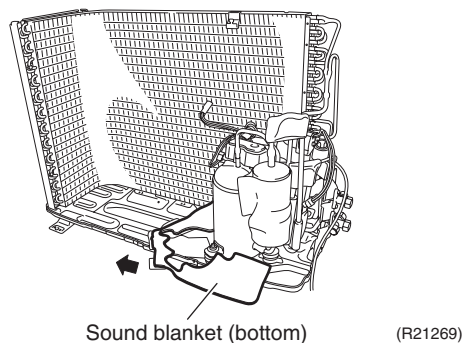
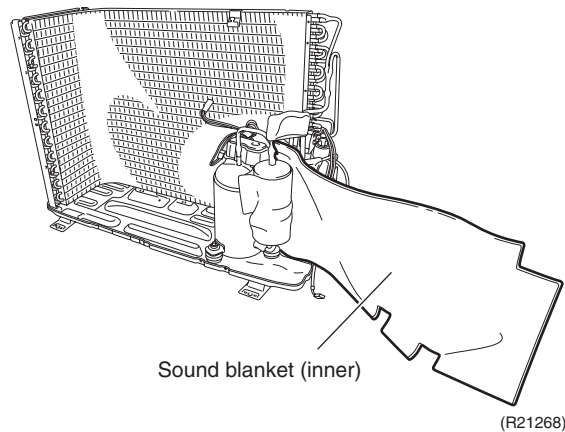
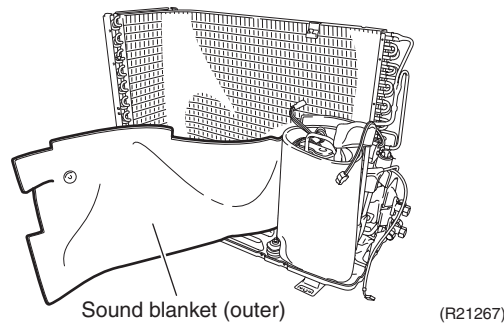
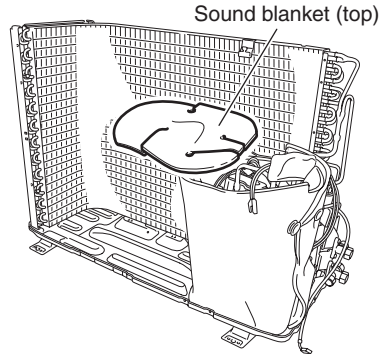
7. Sound Blankets



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"> ■ Since the piping ports are torn easily, remove the sound blankets carefully.
2	Untie the string and pull out the sound blanket (outer).	
3	Pull out the sound blanket (inner).	
4	Remove the sound blanket (bottom).	



8. 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.)



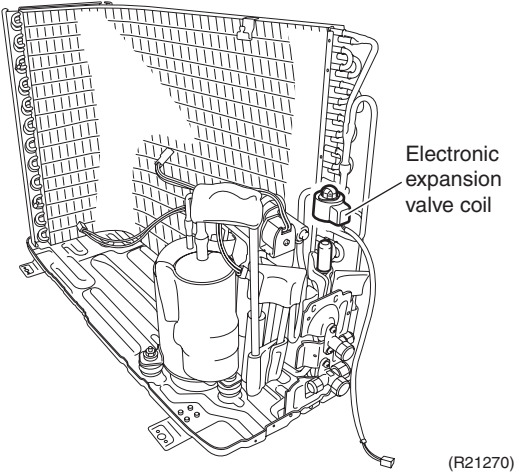
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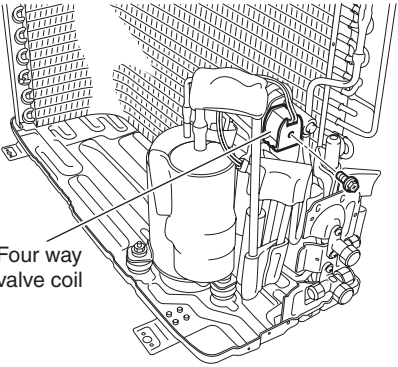
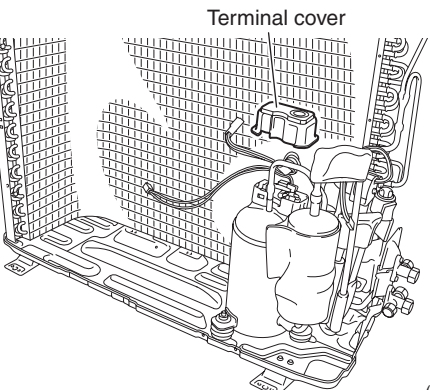
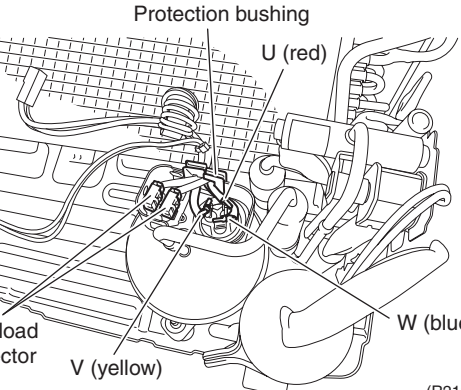
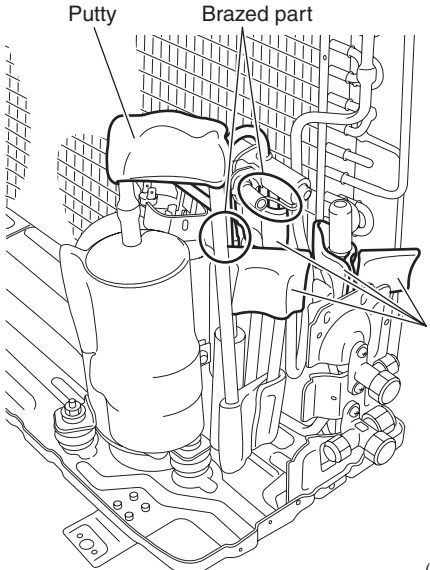
- ◆ From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.
- ◆ **Cautions for restoration**
 1. Restore the piping by non-oxidation brazing.
 2. It is required to prevent the carbonization of the oil inside 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
<p>1 Pull out the electronic expansion valve coil.</p>		

Step	Procedure	Procedure	Points
2	Remove the screw and remove the four way valve coil.	 <p>Four way valve coil</p> <p>(R21271)</p>	<ul style="list-style-type: none"> ■ The cooling only models have no four way valve coil.
3	Remove the terminal cover.	 <p>Terminal cover</p> <p>(R21272)</p>	
4	Remove the protection bushing.	 <p>Protection bushing</p> <p>U (red)</p> <p>W (blue)</p> <p>V (yellow)</p> <p>Overload protector</p> <p>(R21273)</p>	
5	Disconnect the compressor lead wires and the overload protector.		
6	Remove the sheets of putty, to avoid burning them.	 <p>Putty</p> <p>Brazed part</p> <p>Putty</p> <p>(R21274)</p>	
7	Heat up and disconnect the every brazed part of the four way valve.		
8	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.



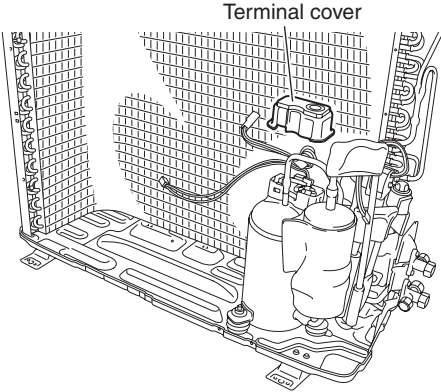
Caution

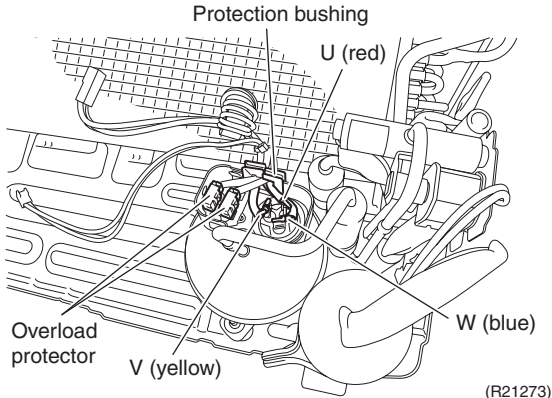
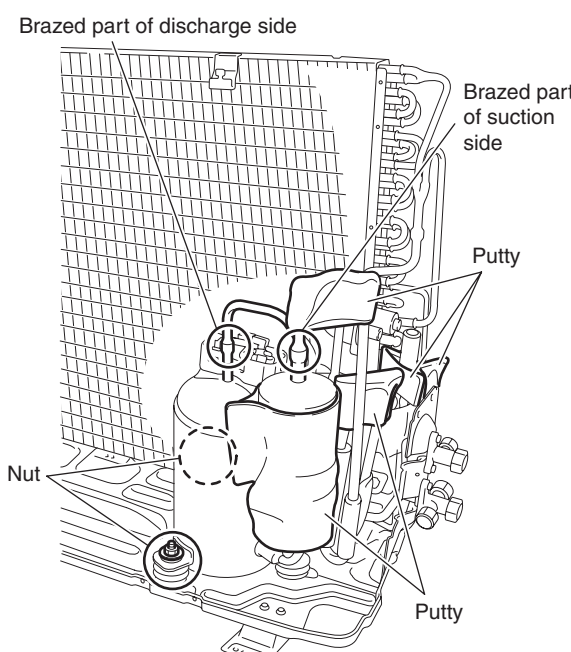
- ◆ From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.
- ◆ Restore the piping by non-oxidation brazing.



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.	<div style="text-align: center;">  <p>(R21272)</p> </div>

Step	Procedure	Procedure	Points
2	Remove the protection bushing.	 <p>Protection bushing U (red) Overload protector V (yellow) W (blue) (R21273)</p>	
3	Disconnect the compressor lead wires and the overload protector.		
4	Remove the sheets of putty, to avoid burning them.	 <p>Brazed part of discharge side Brazed part of suction side Putty Nut (R21277)</p>	
5	Heat up and disconnect the brazed part of the discharge side pipe.		
6	Heat up and disconnect the brazed part of the suction side pipe.		
7	Remove the 2 nuts and remove the compressor.		

Revision History

Month / Year	Version	Revised contents
03 / 2015	Si001420E	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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