

REMOVAL PROCEDURE



SERVICE
MANUAL

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

2.5/3.5 kW Class

-  Outdoor Unit
-  Inverter
-  Pair Type



Service Manual Removal Procedure

Outdoor Unit

Applicable Models

●Heat Pump

**RXF125KC
RXF135KC**

**RZS235KC
RZS235KCG
RZS235KCP
RZS235KCS**

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Note:

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

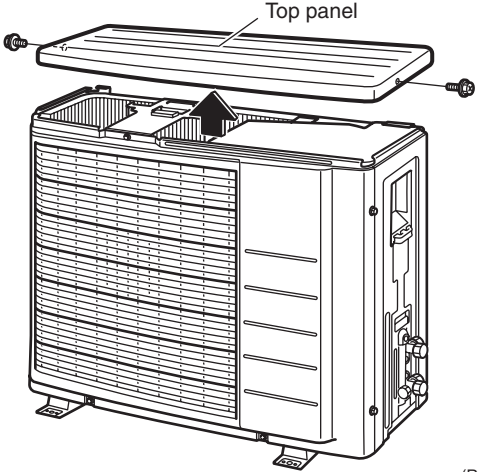
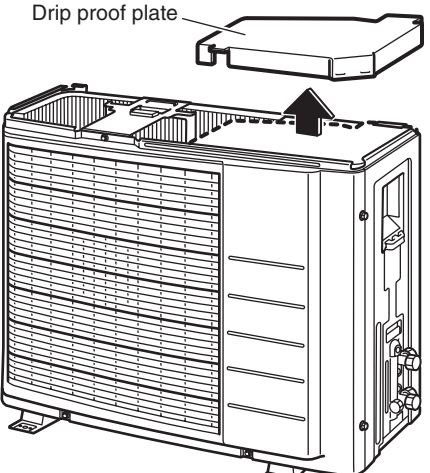
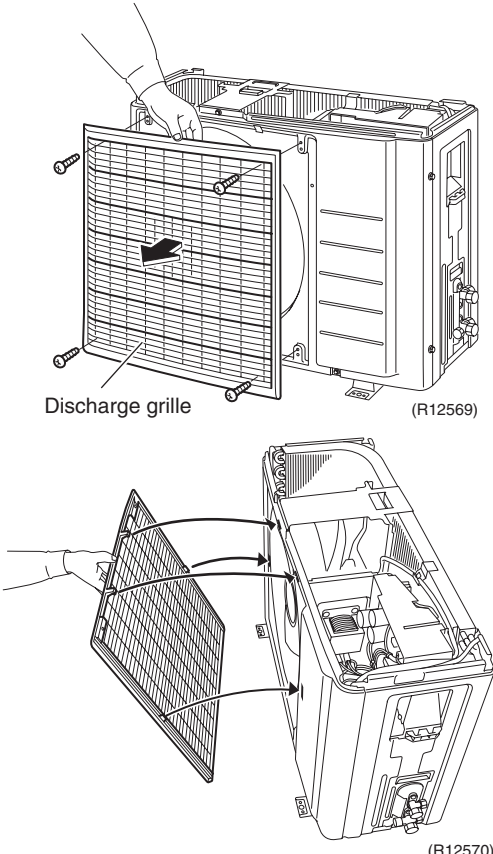
1. Removal of Outer Panels / Fan Motor

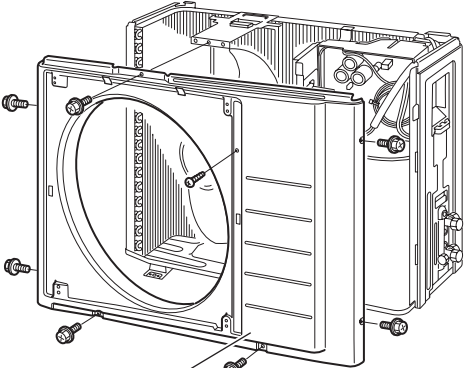
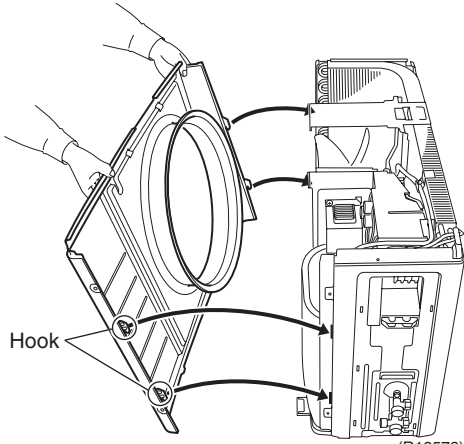
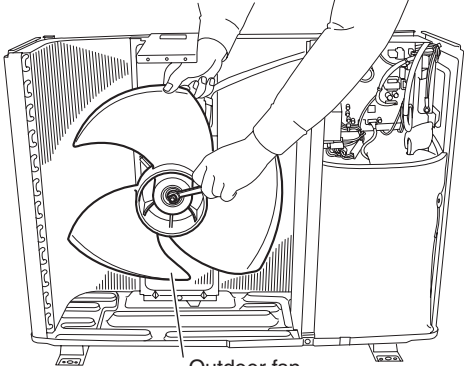
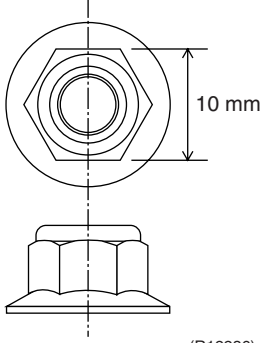
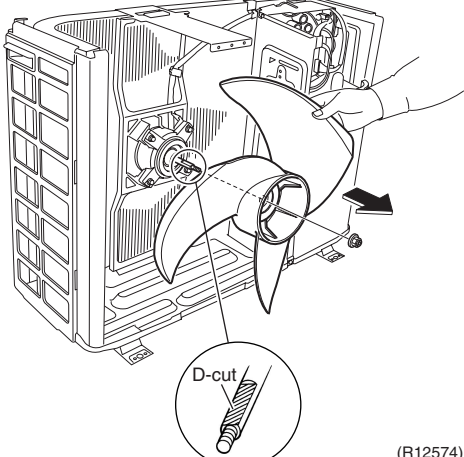
Procedure

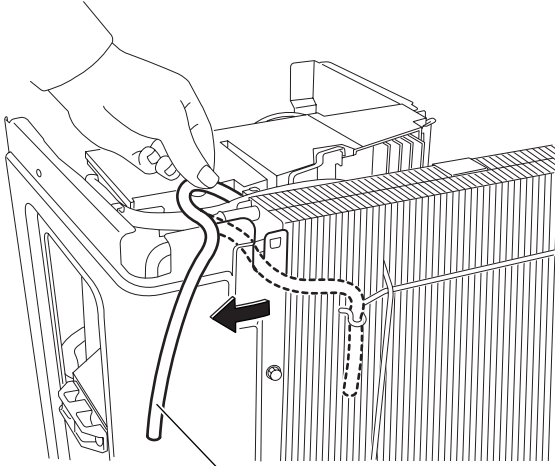
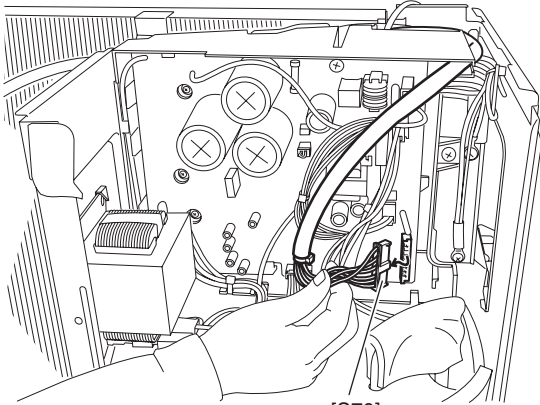
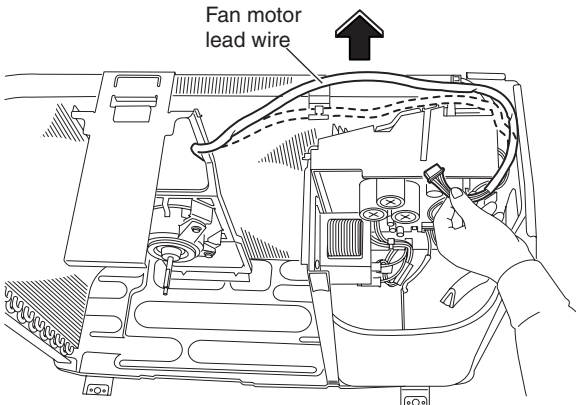


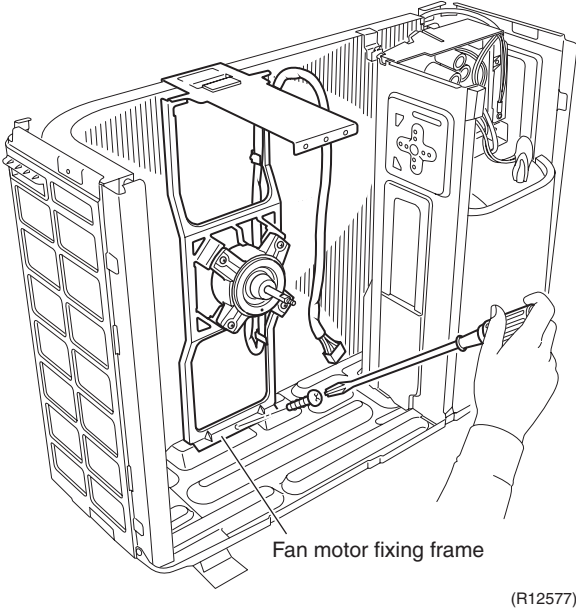
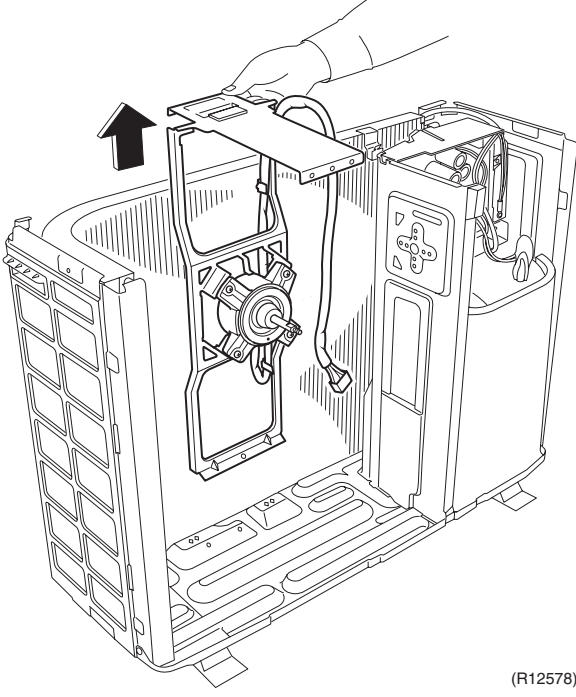
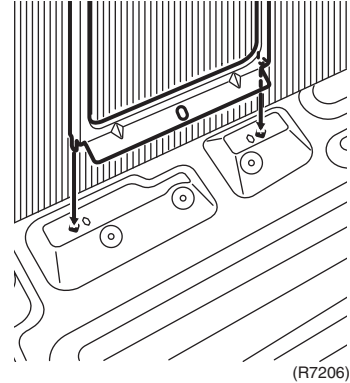
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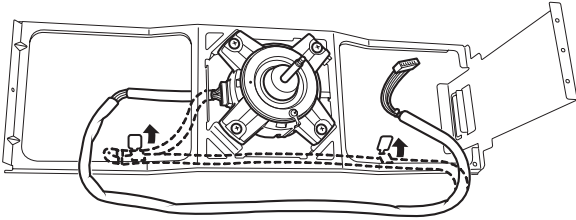
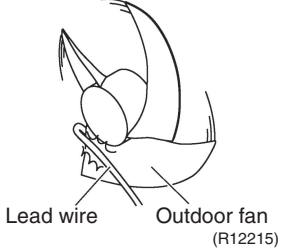
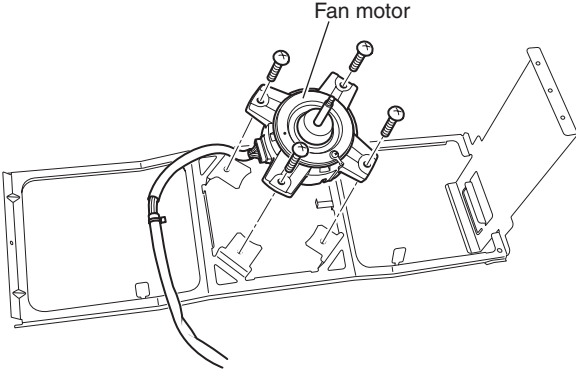
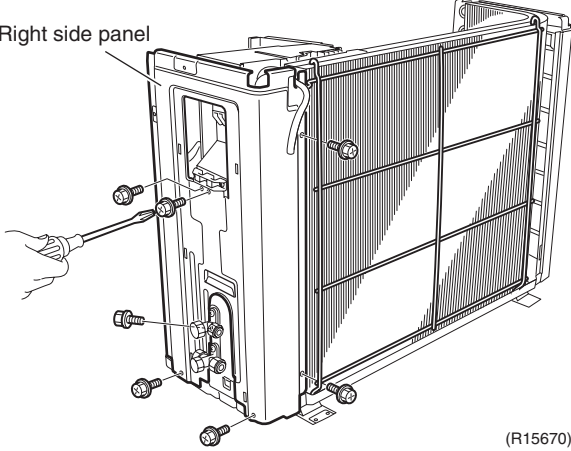
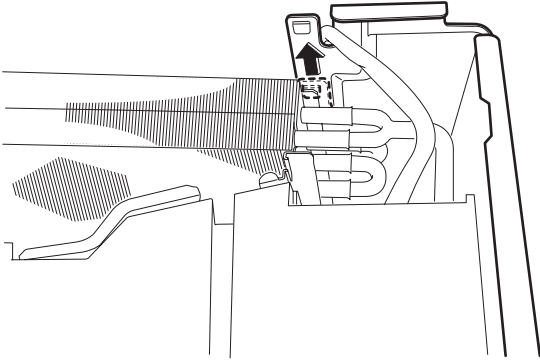
Step	Procedure	Points
1. Appearance features	<p>(R7186)</p> <p>(R3236)</p>	<ul style="list-style-type: none"> Take care not to cut your finger by the fins of the outdoor heat exchanger.
2. Remove the panels.	<p>1 Remove the screw of the stop valve cover. Pull down the stop valve cover and remove it.</p> <p>Stop valve cover</p> <p>Shield plate</p> <p>Hook</p> <p>(R7188)</p> <p>(R7189)</p>	<ul style="list-style-type: none"> The stop valve cover is united with the shield plate. When reassembling, make sure to fit the 5 hooks.

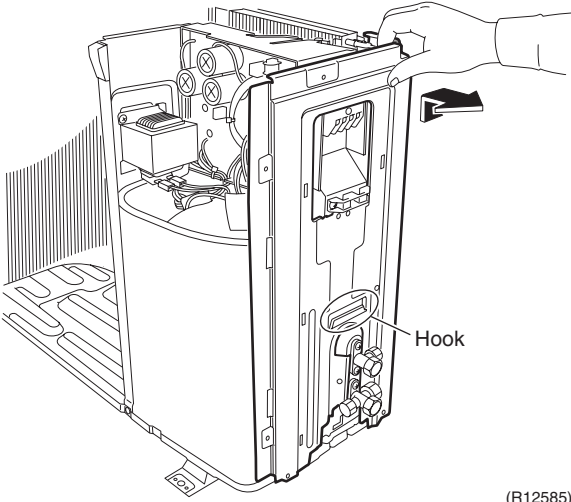
Step		Procedure	Points
2	Remove the 2 screws and lift the top panel.	 <p>Top panel</p> <p>(R7190)</p>	
3	Remove the drip proof plate.	 <p>Drip proof plate</p> <p>(R7191)</p>	
4	Remove the 4 screws and remove the discharge grille.	 <p>Discharge grille</p> <p>(R12569)</p> <p>(R12570)</p>	<p>■ The discharge grille has 4 hooks.</p>

Step	Procedure	Points
5	<p>Remove the 8 screws of the front panel.</p>  <p>Front panel (R12571)</p>	
6	<p>Unfasten the hooks. Pull and remove the front panel.</p>  <p>Hook (R12572)</p>	<p>■ The front panel has 4 hooks.</p>
3.	<p>Remove the fan motor.</p>	<p>■ Nut size: M6</p>
1	<p>Remove the nut of the outdoor fan.</p>  <p>Outdoor fan (R15669)</p>	 <p>10 mm (R12236)</p>
2	<p>Remove the outdoor fan.</p>  <p>D-cut (R12574)</p>	<p>■ When reassembling, align the ▼ mark of the outdoor fan with the D-cut section of the motor shaft.</p>

Step	Procedure	Procedure	Points
3	Release the outdoor temperature thermistor.	 <p data-bbox="651 719 855 770">Outdoor temperature thermistor</p> <p data-bbox="970 757 1038 779">(R11829)</p>	
4	Disconnect the connector for the fan motor [S70].	 <p data-bbox="855 1218 911 1240">[S70]</p> <p data-bbox="999 1245 1067 1267">(R15680)</p>	
5	Release the fan motor lead wire from the hook.	 <p data-bbox="695 1317 799 1368">Fan motor lead wire</p> <p data-bbox="999 1731 1067 1753">(R12576)</p>	

Step	Procedure	Points
6	Remove the screw of the fan motor fixing frame.	
	 <p>Fan motor fixing frame</p> <p>(R12577)</p>	
7	Lift and remove the fan motor fixing frame.	<ul style="list-style-type: none"> ■ When reassembling, fit the lower hooks into the bottom frame.
	 <p>(R12578)</p>	 <p>(R7206)</p>

Step	Procedure	Points
8	<p>Release the fan motor lead wire from the 2 hooks.</p>  <p>(R12579)</p>	<p>■ When reassembling, put the fan motor lead wire through the back of the fan motor so as not to be entangled with the outdoor fan.</p>  <p>Lead wire Outdoor fan (R12215)</p>
9	<p>Remove the 4 screws and remove the fan motor.</p>  <p>Fan motor</p> <p>(R12580)</p>	
4.	<p>Remove the right side panel.</p>	
1	<p>Remove the 7 screws on the right side panel.</p>  <p>Right side panel</p> <p>(R15670)</p>	
2	<p>Unfasten the hook on the rear side.</p>  <p>(R12584)</p>	<p>■ When reassembling, make sure to fit the hook.</p>

Step	Procedure	Points
3	Lift up the right side panel and remove it.	<ul style="list-style-type: none"> ■ When reassembling, make sure to fit the hook.
 <p style="text-align: right;">(R12585)</p>		

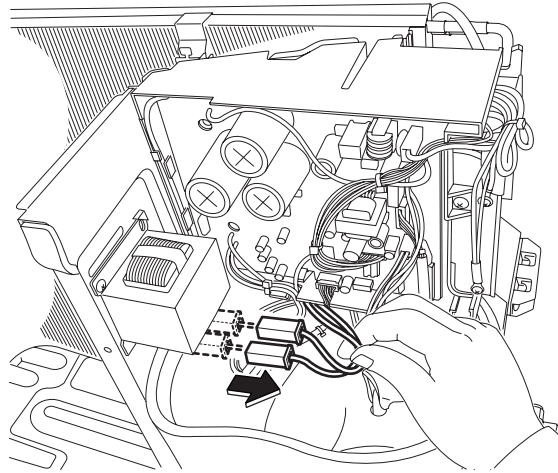
2. Removal of Electrical Box

Procedure

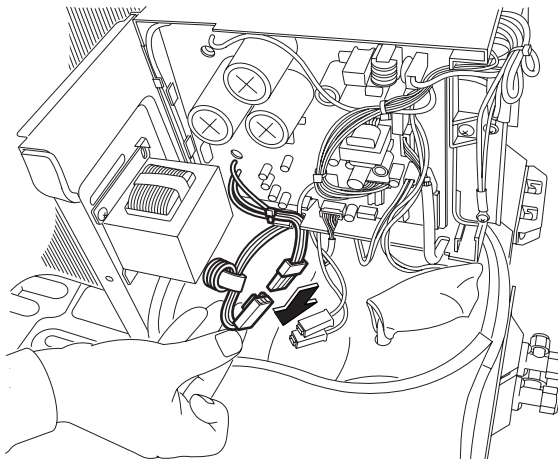


Warning Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

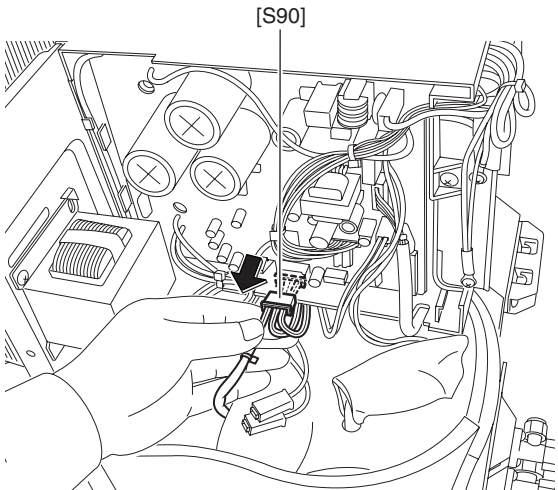
Step	Procedure	Points
1	Disconnect the 2 connectors for the reactor.	Preparation <ul style="list-style-type: none"> ■ Remove the panels and disconnect the connector for the fan motor according to the "Removal of Outer Panels / Fan Motor". ■ Rear: Brown Front: White
2	Disconnect the relay connector for the compressor.	<ul style="list-style-type: none"> ■ When reassembling, coil the excessive lead wire and hang the loop on the hook.
3	Disconnect the connector for the thermistors [S90].	



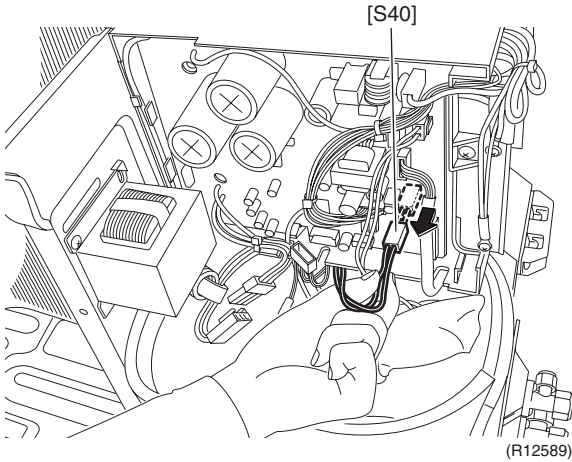
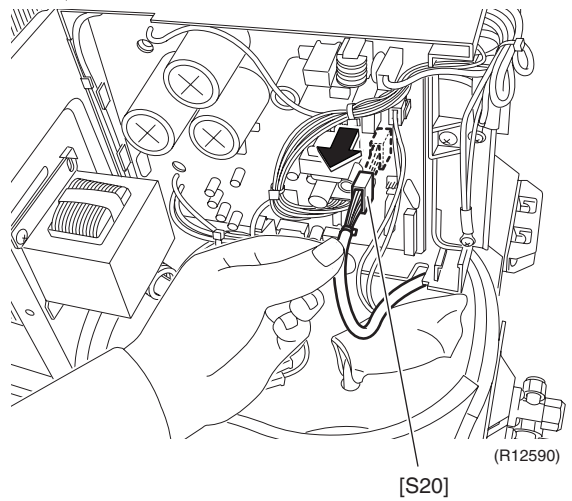
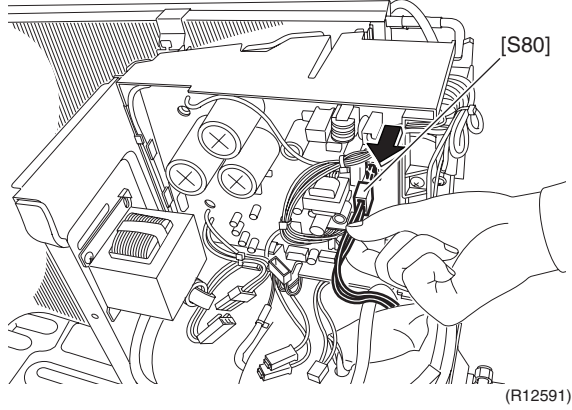
(R12586)

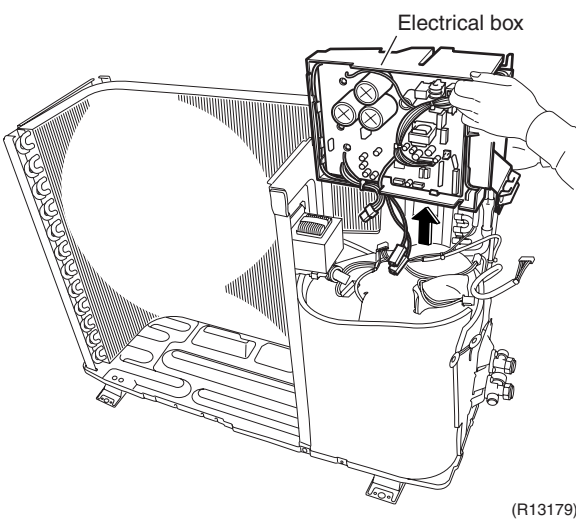


(R15671)



(R15672)

Step	Procedure	Points
4	Disconnect the connector for the overload protector [S40].	
		
5	Disconnect the connector for the electronic expansion valve coil [S20].	
		
6	Disconnect the connector for the four way valve coil [S80].	
		

Step	Procedure	Points
7	Lift and remove the electrical box.	
 <p data-bbox="890 226 1018 248">Electrical box</p> <p data-bbox="1002 712 1070 734">(R13179)</p>		

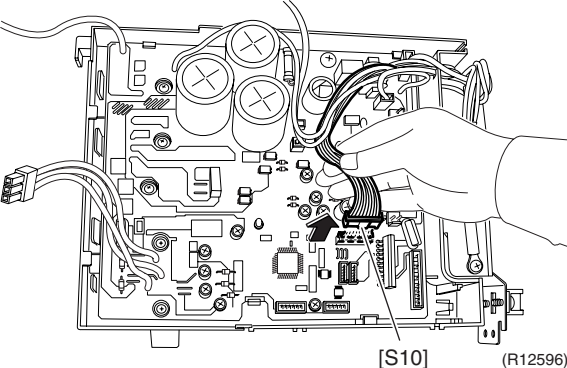
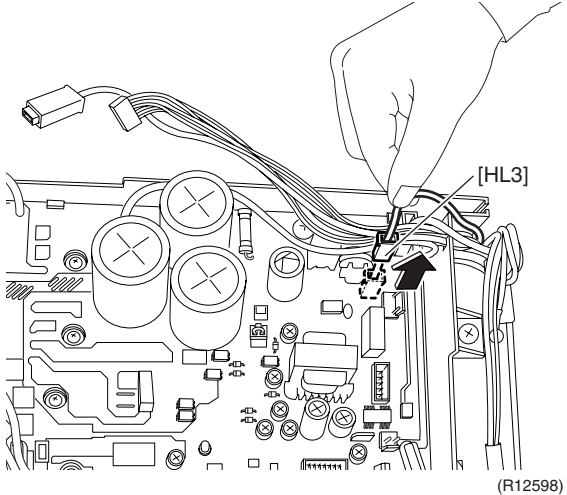
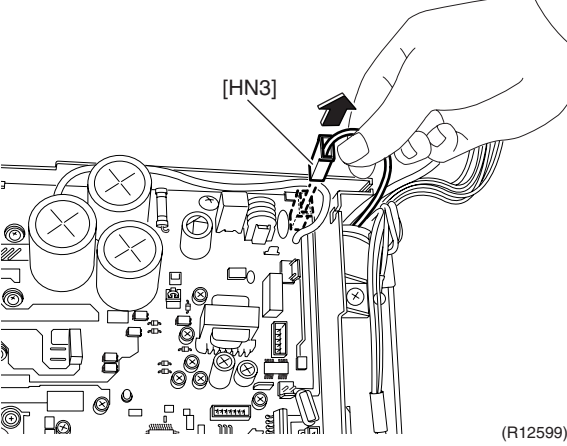
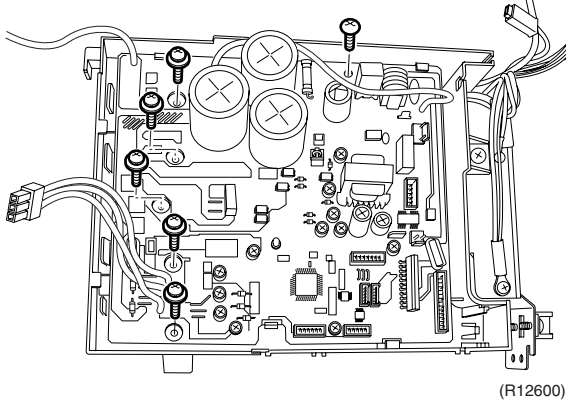
3. Removal of PCBs

Procedure

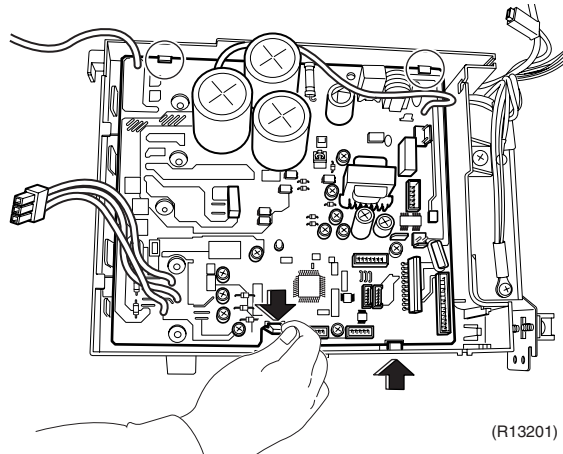


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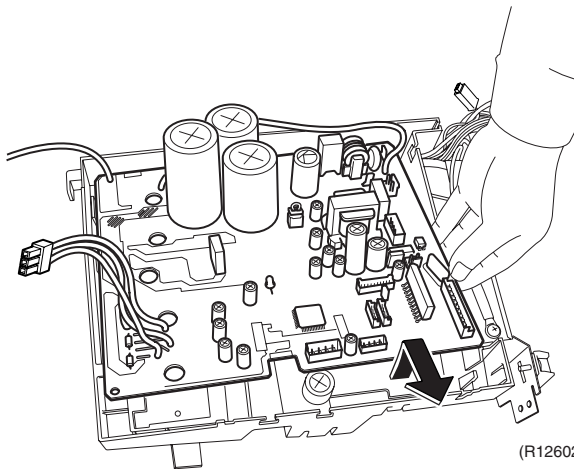
Step	Procedure	Points
1. Remove the main PCB.		<ul style="list-style-type: none"> You can remove the main PCB when you disconnect the lead wires on the terminal board without removing the electrical box.
1	Feature of the main PCB	
	<p style="text-align: right;">(R12593)</p>	
2	Cut the 3 clamps.	
	<p style="text-align: right;">(R12594)</p>	
3	Release the harnesses.	
	<p style="text-align: right;">(R12595)</p>	

Step	Procedure	Points
4	Disconnect the connector for the filter PCB [S10].	
		
5	Disconnect the connector for the filter PCB [HL3].	
		
6	Disconnect the connector for the filter PCB [HN3].	
		
7	Remove the 6 screws.	
		

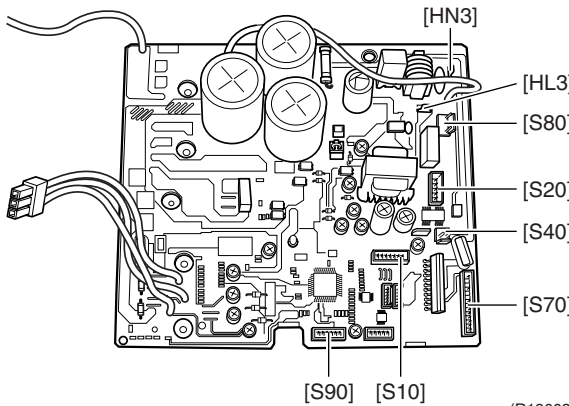
Step	Procedure	Points
8	Unfasten the 2 hooks on the lower side.	<ul style="list-style-type: none"> ■ The electrical box has also 2 hooks on the upper side. When reassembling, be sure to fit all the 4 hooks.
9	Lift and pull out the main PCB.	<ul style="list-style-type: none"> [S10] [HL3] [HN3]: filter PCB [S20]: electronic expansion valve coil [S40]: overload protector [S70]: fan motor [S80]: four way valve coil [S90]: thermistors



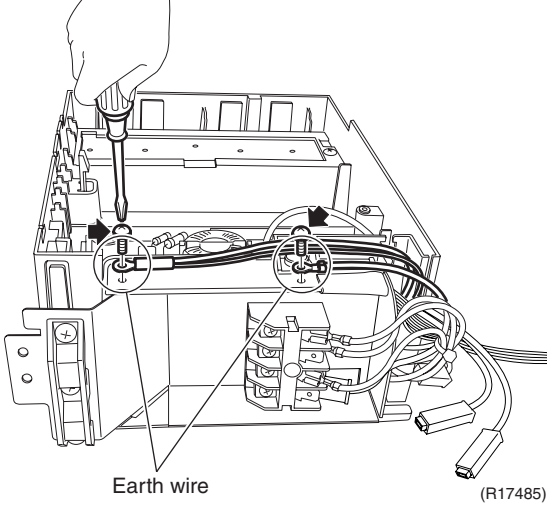
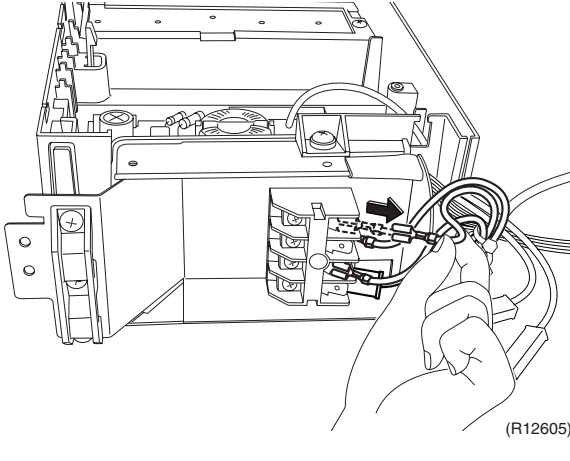
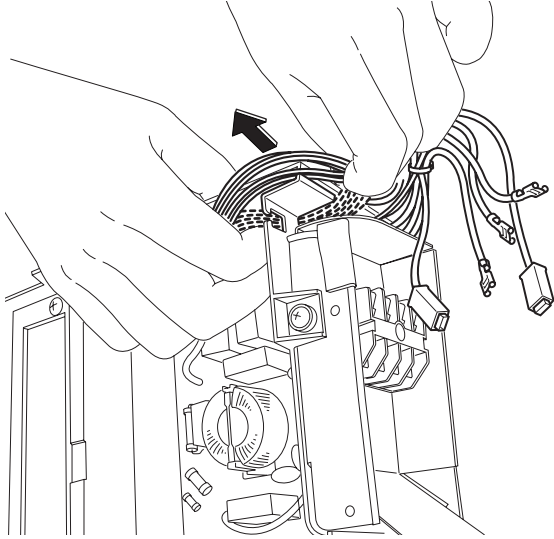
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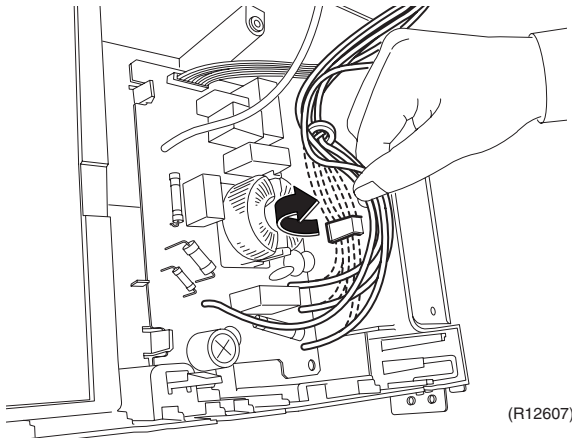
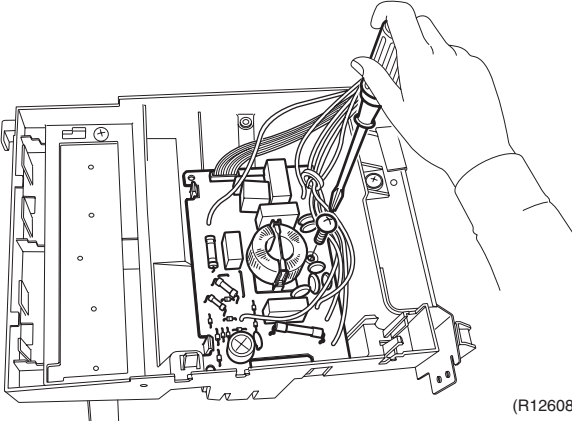
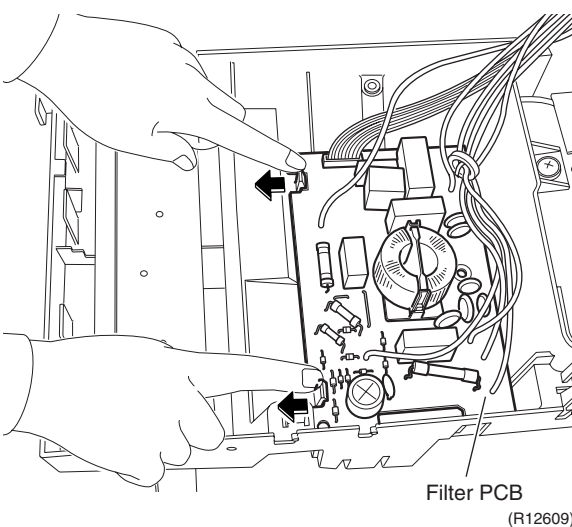
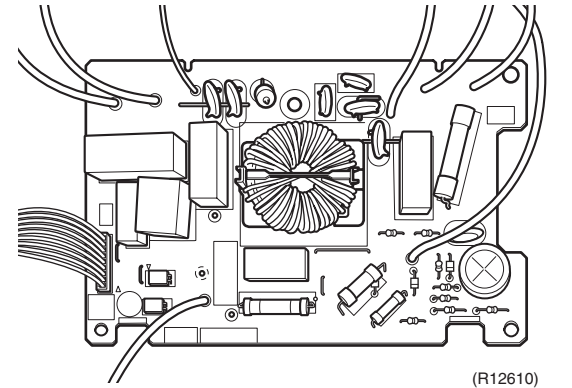


(R12602)



(R12603)

Step	Procedure	Points
2.	Remove the filter PCB.	
1	<p>Remove the 2 screws and release the earth wires.</p>  <p>Earth wire (R17485)</p>	
2	<p>Disconnect the connectors from the terminal board.</p>  <p>(R12605)</p>	<p>1 : black, upper 2 : white, lower 3 : red, upper ⊥ : green, lower</p>
3	<p>Release the harnesses from the groove.</p>  <p>(R12606)</p>	

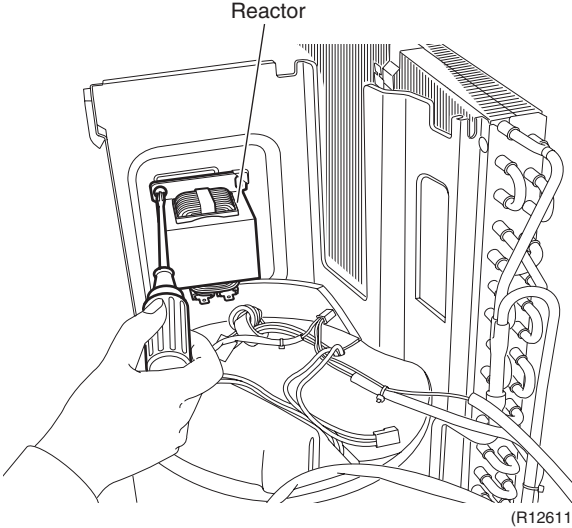
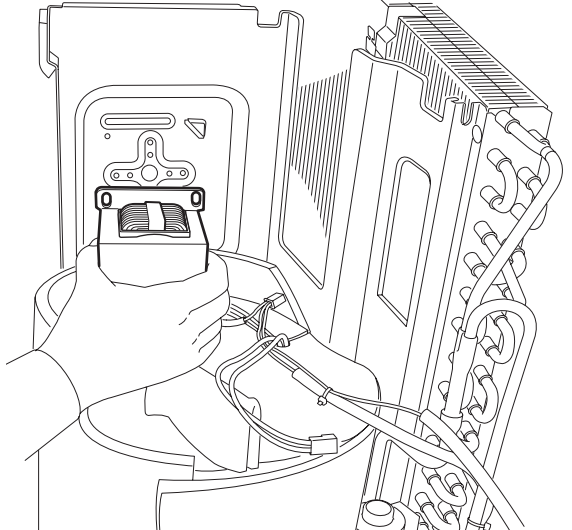
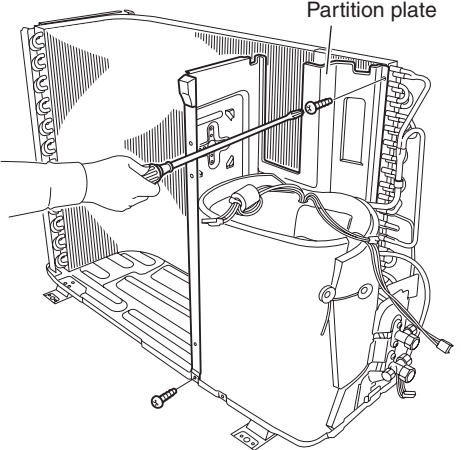
Step	Procedure	Points
4	Release the harnesses from the hook.	
	 <p>(R12607)</p>	
5	Remove the screw.	
	 <p>(R12608)</p>	
6	Unfasten the 2 hooks and remove the filter PCB.	
	 <p>Filter PCB (R12609)</p>	
	 <p>(R12610)</p>	

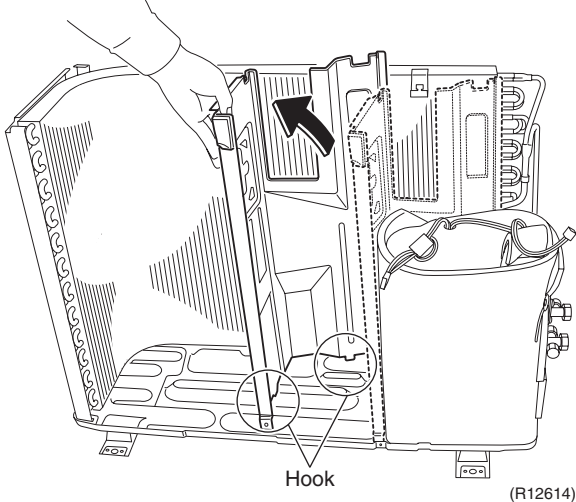
4. Removal of Reactor / Partition Plate

Procedure



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 reactor. 1 Remove the screw and remove the reactor.	 <p>(R12611)</p>  <p>(R12612)</p>	<p>Preparation</p> <ul style="list-style-type: none"> ■ Remove the panels according to the "Removal of Outer Panels / Fan Motor". ■ Remove the electrical box according to the "Removal of Electrical Box". <ul style="list-style-type: none"> ■ When reassembling, be sure to fit the 3 hooks of the reactor.
2. Remove the partition plate. 1 Remove the 2 screws.	 <p>(R12613)</p>	

Step	Procedure	Points
<p>2</p>	<p>The partition plate has 2 hooks on the lower side. Lift and pull the partition plate and remove it.</p>  <p style="text-align: center;">Hook</p> <p style="text-align: right;">(R12614)</p>	<ul style="list-style-type: none"> ■ When reassembling, fit the lower hooks into the bottom frame.

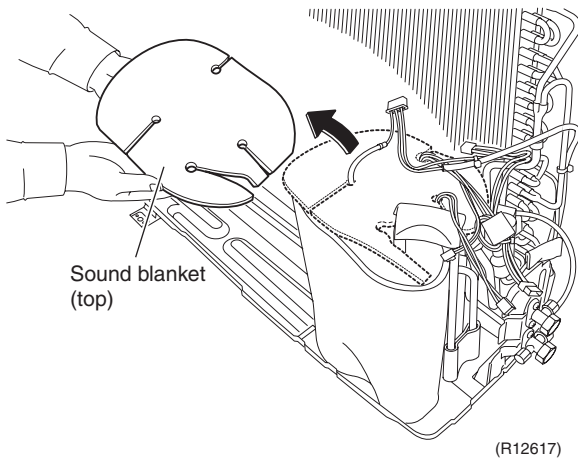
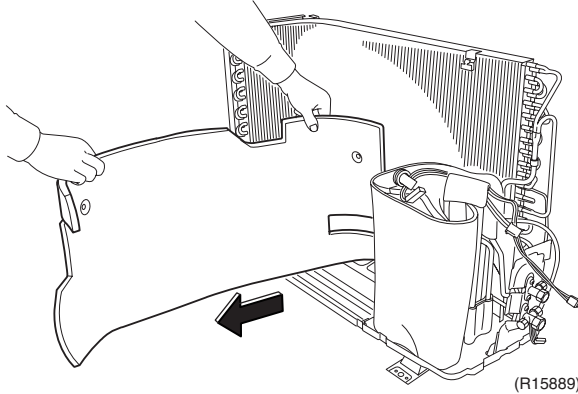
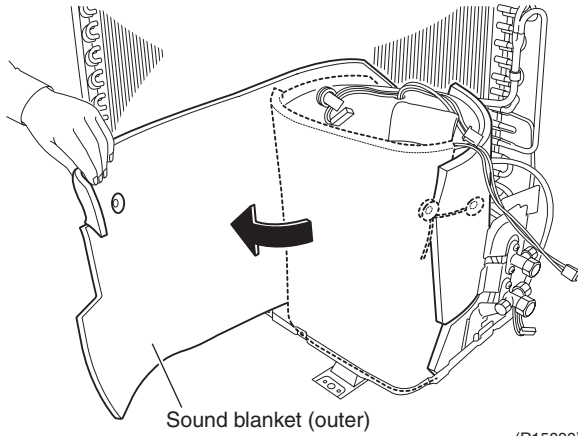
5. Removal of Sound Blankets

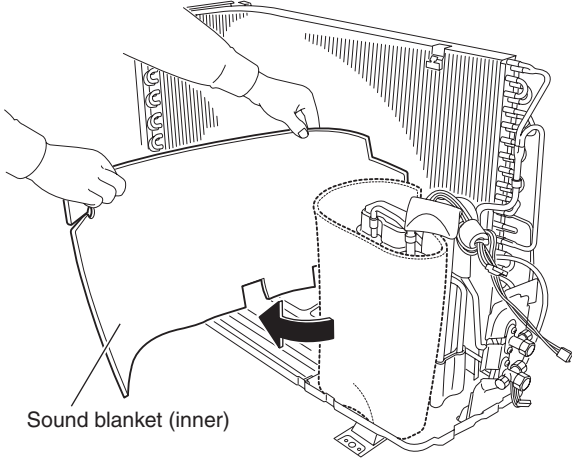
Procedure



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

Step	Procedure	Points
1	Untie the string and open the sound blanket (outer).	<p>Preparation</p> <ul style="list-style-type: none"> ■ Remove the panels according to the “Removal of Outer Panels / Fan Motor”. ■ Remove the electrical box according to the “Removal of Electrical Box”.
2	Pull the sound blanket (outer) out.	<ul style="list-style-type: none"> ■ Since the piping ports are torn easily, remove the sound blanket carefully.
3	Remove the sound blanket (top).	



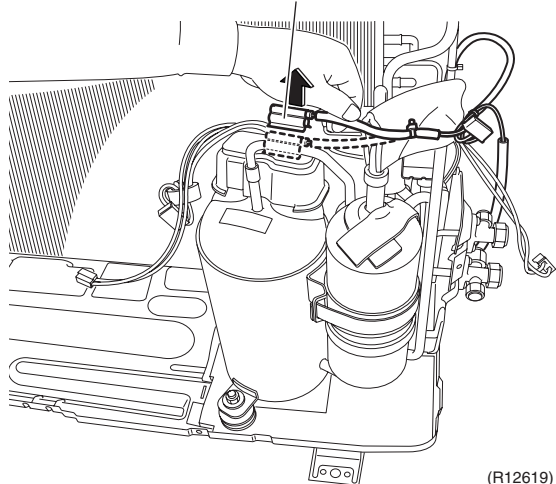
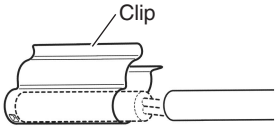
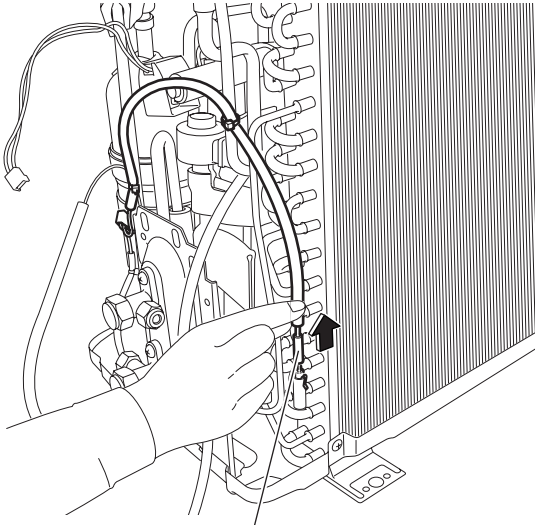
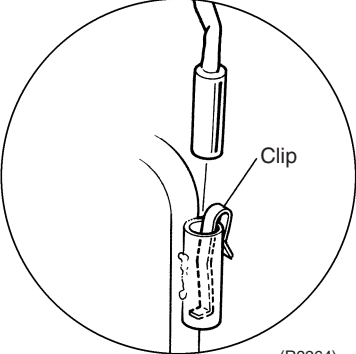
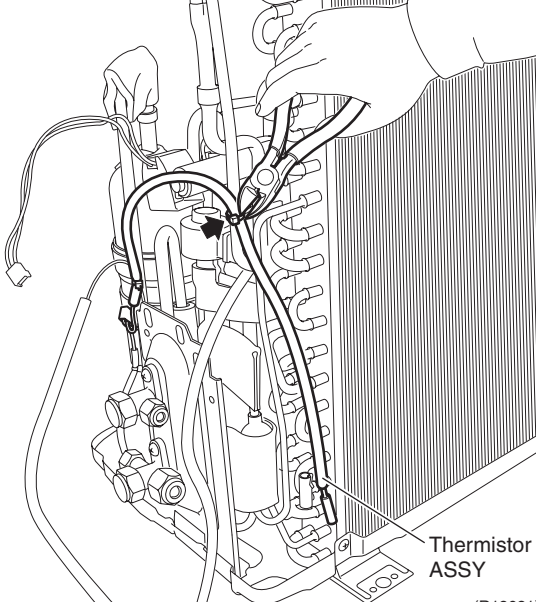
Step	Procedure	Points
<p>4</p>	<p>Pull the sound blanket (inner) out.</p>  <p style="text-align: right;">(R12618)</p>	<ul style="list-style-type: none"> ■ Since the piping ports are torn easily, remove the sound blanket carefully.

6. Removal of Thermistor ASSY

Procedure



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

Step	Procedure	Procedure	Points
1	Release the discharge pipe thermistor.	<p style="text-align: center;">Discharge pipe thermistor</p>  <p style="text-align: right;">(R12619)</p>	<ul style="list-style-type: none"> ■ Be careful not to lose the clip for the thermistor.  <p style="text-align: right;">(R12279)</p>
2	Pull out the outdoor heat exchanger thermistor.	 <p style="text-align: center;">Outdoor heat exchanger thermistor</p> <p style="text-align: right;">(R12620)</p>	<ul style="list-style-type: none"> ■ Be careful not to lose the clip for the thermistor.  <p style="text-align: right;">(R3264)</p>
3	Cut the clamp and remove the thermistor ASSY.	 <p style="text-align: right;">Thermistor ASSY</p> <p style="text-align: right;">(R12621)</p>	

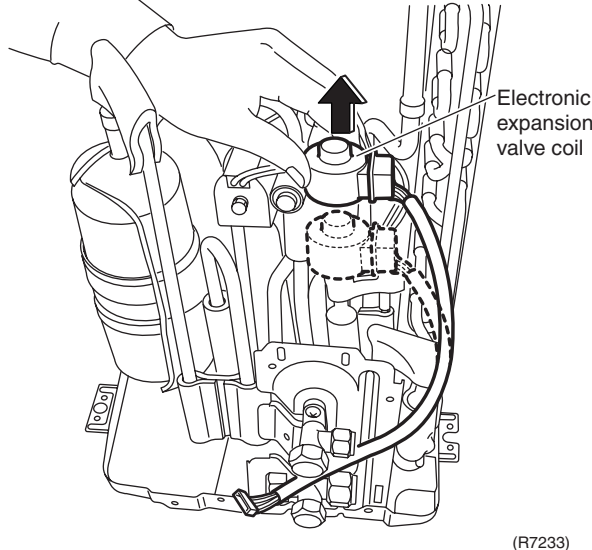
7. Removal of Four Way Valve

Procedure

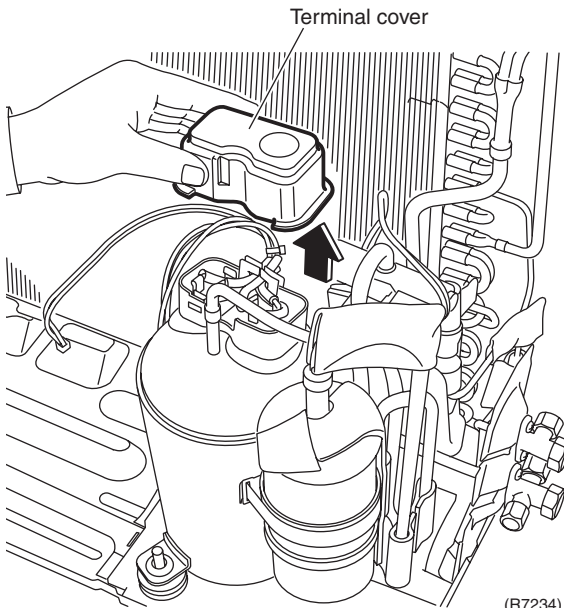


Warning Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

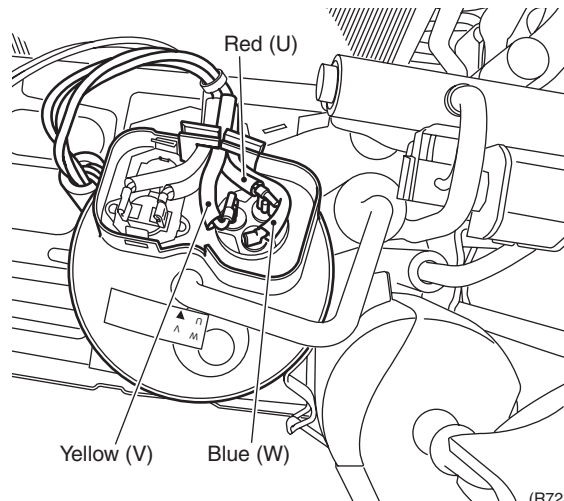
Step	Procedure	Points
1	Pull out the electronic expansion valve coil.	
2	Remove the terminal cover.	
3	Disconnect the lead wires of the compressor.	



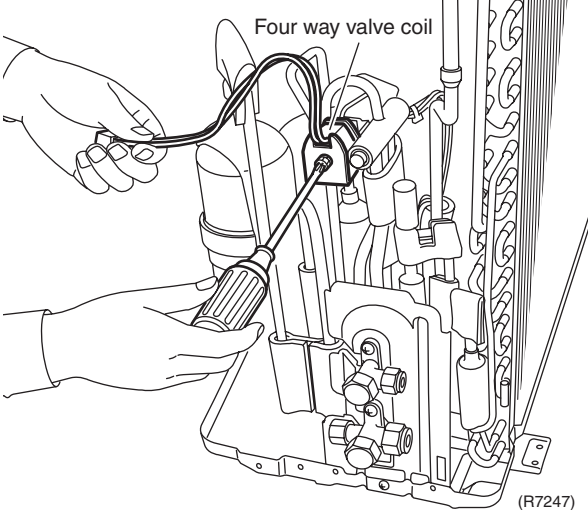
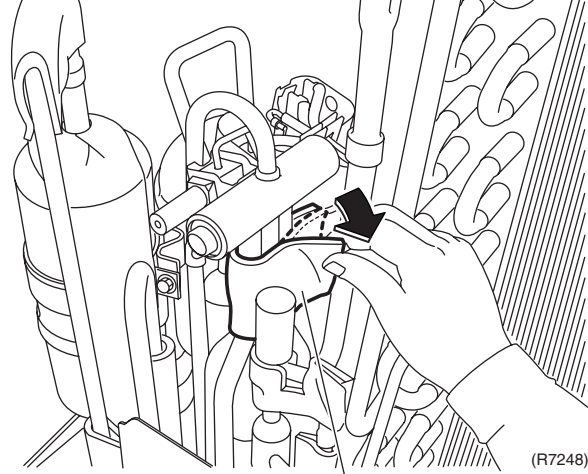
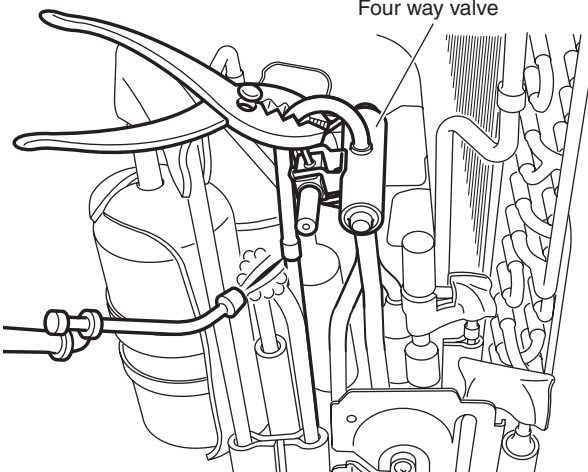
(R7233)

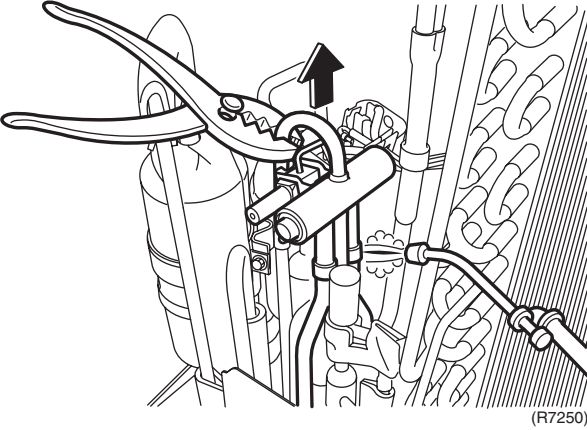


(R7234)



(R7235)

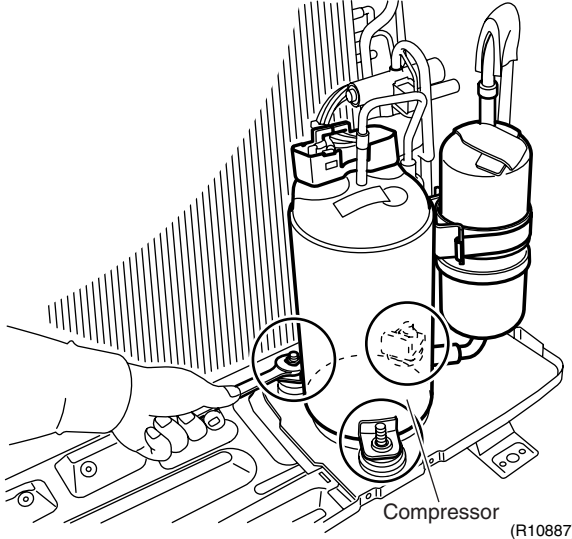
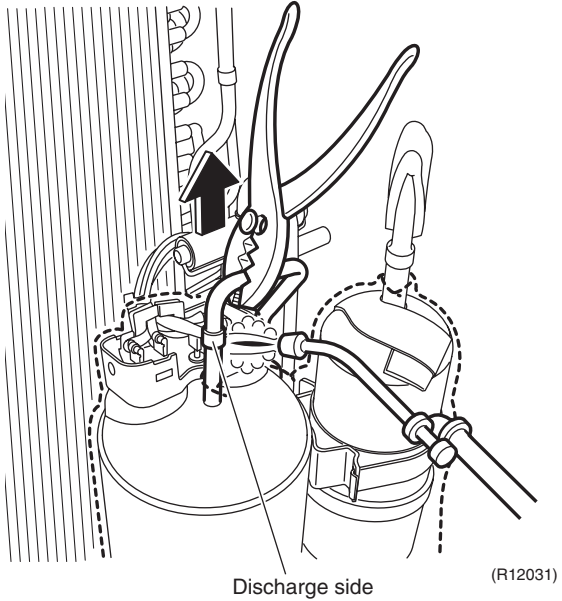
Step	Procedure	Points
4	<p>Remove the screw and remove the four way valve coil.</p>  <p>(R7247)</p>	<p>Warning Be careful not to get yourself burnt with the pipes and other parts that are heated by the gas brazing machine.</p> <p>Warning If the refrigerant gas leaks during work, ventilate the room. (If the refrigerant gas is exposed to flames, toxic gas may be generated.)</p> <p>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.</p> <p>Cautions for restoration</p> <ol style="list-style-type: none"> 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.) For the sake of this, wrap the four way valve with wet cloth and provide water so that the cloth does not dry.
5	<p>Remove the putty.</p>  <p>Putty</p> <p>(R7248)</p>	<p>In case of difficulty with gas brazing machine</p> <ol style="list-style-type: none"> 1. Disconnect the brazed part where is easy to disconnect and restore. 2. Cut pipes on the main unit in order to make it easy to disconnect.
6	<p>Heat up the brazed parts and withdraw the piping with pliers.</p>  <p>Four way valve</p> <p>(R7249)</p>	
<p>■ Before working, make sure that the refrigerant gas is empty in the circuit.</p> <p>■ Be sure to apply nitrogen replacement when heating up the brazed part.</p>		

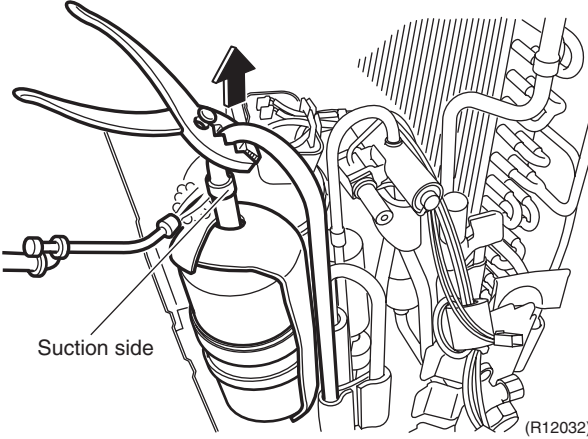
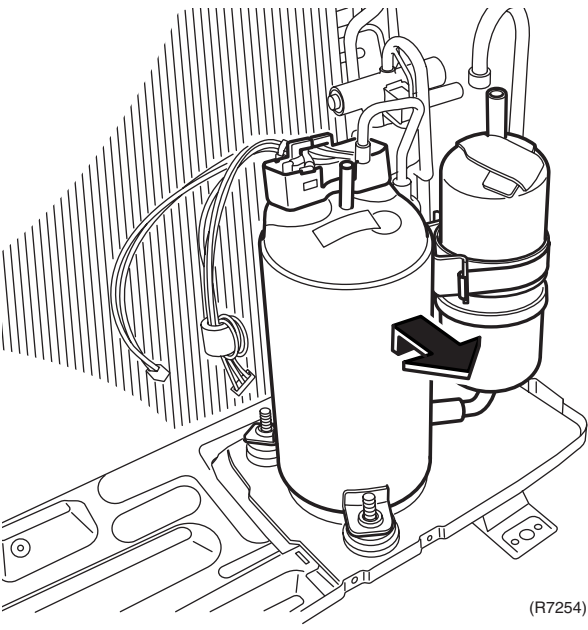
Step	Procedure	Points
		<p>Note:</p> <ul style="list-style-type: none"> ■ Do not use a metal saw for cutting pipes by all means because the sawdust comes into the circuit. ■ When withdrawing the pipes, be careful not to pinch them firmly with pliers. The pipes may get deformed. ■ Provide a protective sheet or a steel plate so that the brazing flame cannot influence peripheries.

8. Removal of Compressor

Procedure

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 3 nuts of the compressor.</p>		<p>Warning Be careful not to get yourself burnt with the pipes and other parts that are heated by the gas brazing machine.</p> <p>Warning If the refrigerant gas leaks during work, ventilate the room. (If the refrigerant gas is exposed to flames, toxic gas may be generated.)</p> <p>Warning Since it may happen that the refrigerant oil in the compressor catches fire, prepare wet cloth so as to extinguish fire immediately.</p>
<ul style="list-style-type: none"> ■ 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. 		<p>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.</p> <p>Cautions for restoration</p> <ol style="list-style-type: none"> 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.) For the sake of this, wrap the four way valve with wet cloth and provide water so that the cloth does not dry. <p>In case of difficulty with gas brazing machine</p> <ol style="list-style-type: none"> 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.
<p>2 Heat up the brazed part of the discharge side and disconnect.</p>		

Step	Procedure	Points
3	<p>Heat up the brazed part of the suction side and disconnect.</p>  <p style="text-align: right;">(R12032)</p>	<p>Note:</p> <ul style="list-style-type: none"> ■ 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.
4	<p>Lift the compressor up and remove it.</p>  <p style="text-align: right;">(R7254)</p>	<ul style="list-style-type: none"> ■ Be careful so as not to burn the compressor terminals, the name plate, the heat exchanger fins.

Revision History

Month / Year	Version	Revised contents
08/2012	Si001157	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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