


REMOVAL PROCEDURE



SERVICE
MANUAL

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

2.5/4.2/4.6/5.0 kW Class

-  Outdoor Unit
-  Inverter
-  Pair Type



Service Manual Removal Procedure

Outdoor Unit

●Cooling Only

RKS42G2V1B

RKS42J2V1B

●Heat Pump

RXG50JV2C

RXG50KV2C

RXL25G2V1B

RXL25G3V1B

RXS42G2V1B

RXS42J2V1B

RXS46JV2C

ARXS42G2V1B

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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. Removal of Outer Panels

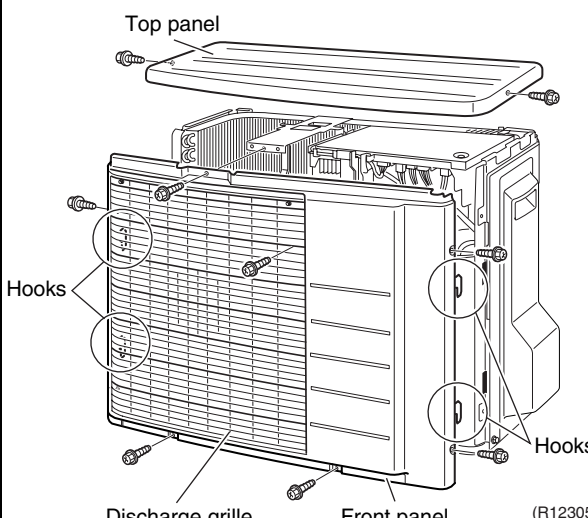
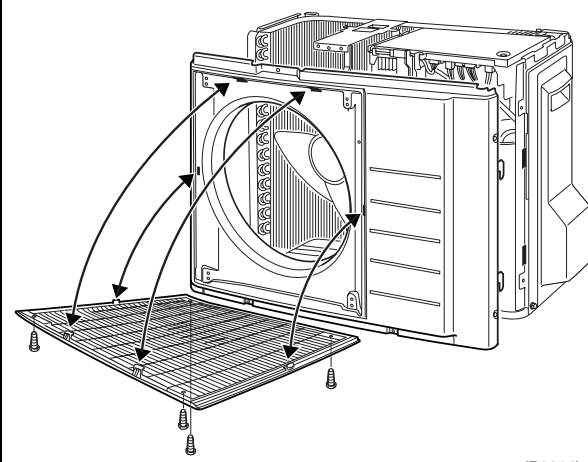
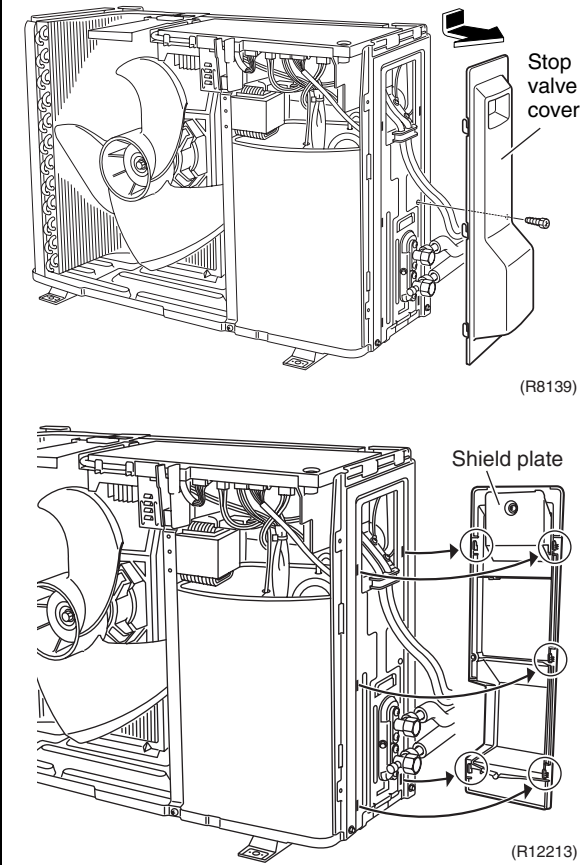
Procedure



Warning

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

Step	Procedure	Points
1. Features	<p>(R7186)</p> <p>Guard net (R18392)</p>	<p>★ Illustrations are slightly different depending on the model.</p> <p>■ Some models do not have guard nets.</p>
2. Remove the panels.	<p>1 Remove the screw and remove the drain pan heater cover.</p> <p>Drain pan heater cover</p> <p>(R9329)</p>	<p>■ Some models do not have a drain pan heater cover.</p>

Step	Procedure	Points
2	<p>Remove the 2 screws to remove the top panel, and 7 screws to remove the front panel.</p> 	<ul style="list-style-type: none"> ■ The front panel has 4 hooks.
3	<p>Remove the 4 screws and remove the discharge grille.</p> 	<ul style="list-style-type: none"> ■ When reassembling, make sure to fit the 4 hooks.
4	<p>Remove the screw and remove the stop valve cover.</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.

2. Removal of Electrical Box

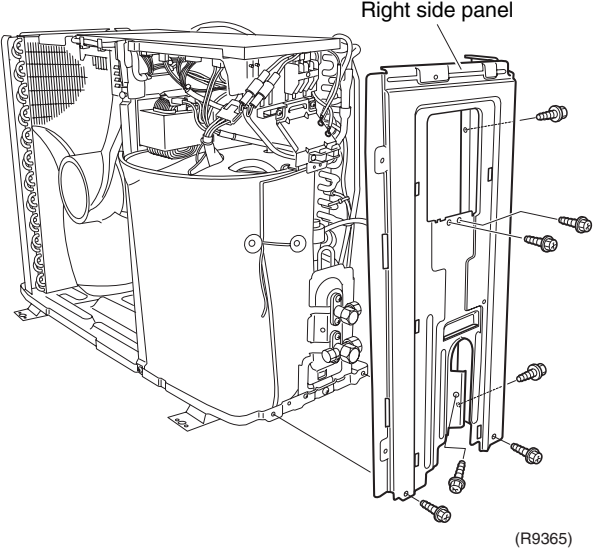
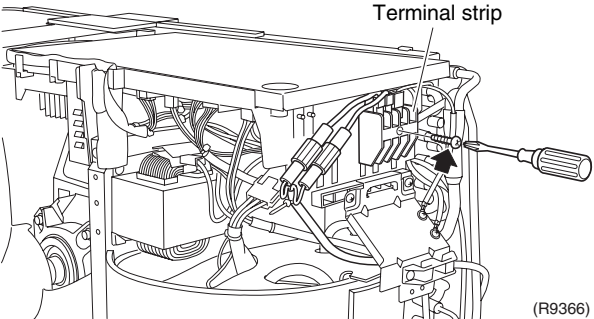
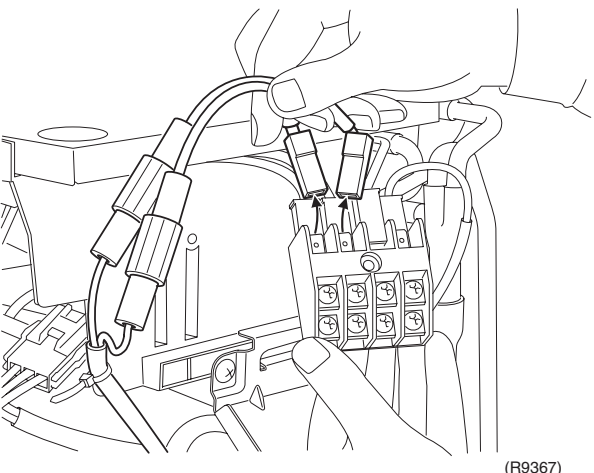
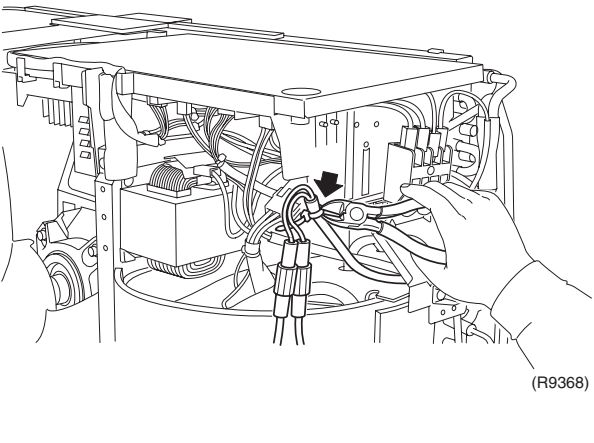
Procedure

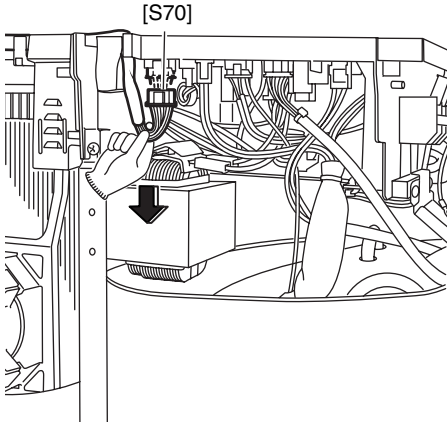
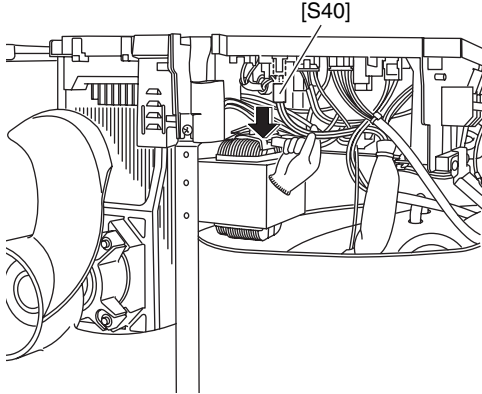
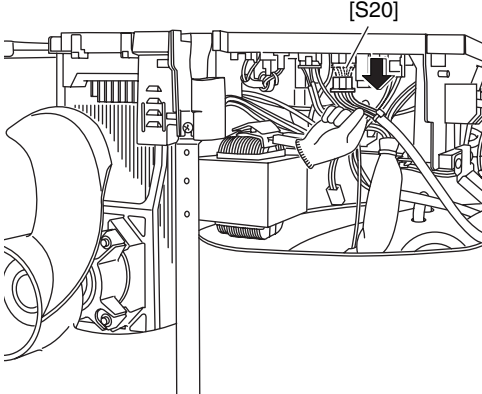
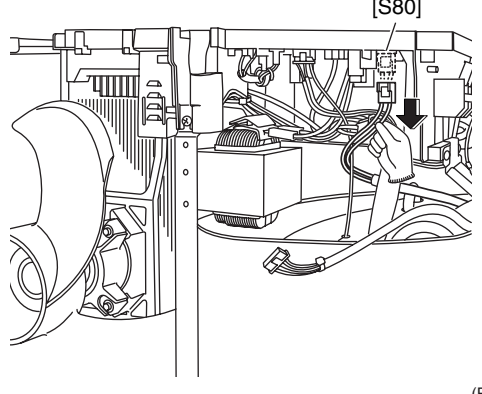


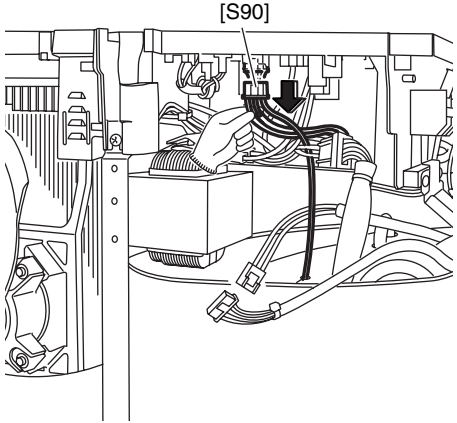
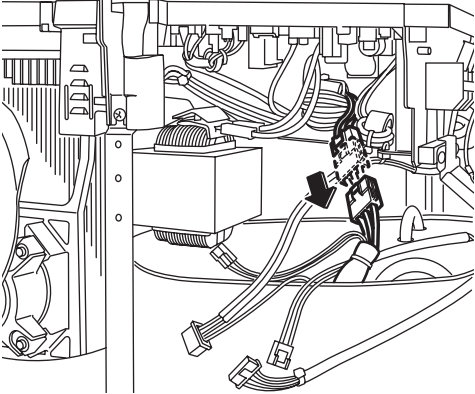
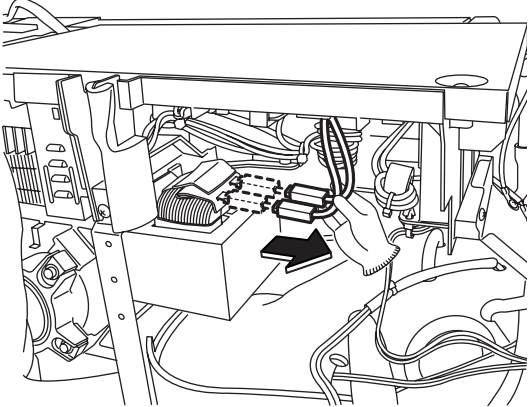
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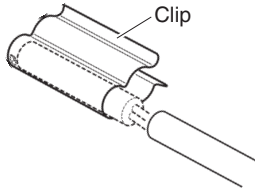
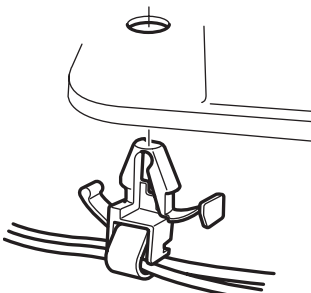
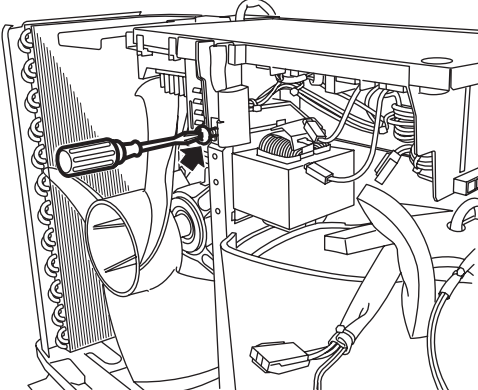
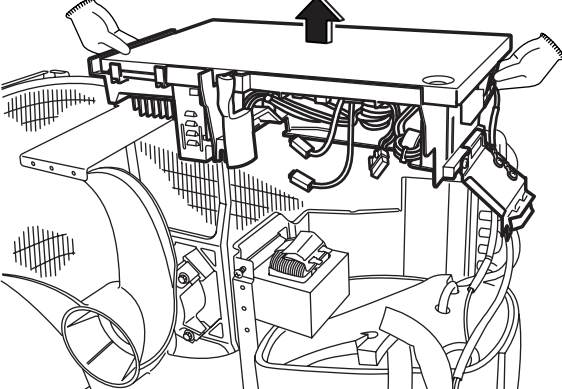
Be sure to wait 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
<p>1. Disconnect the connecting wires.</p> <p>1 Remove the 3 screws to remove the wiring fixture. Then remove the all screws to disconnect the power supply cables and the connecting wires.</p>	<p style="text-align: right;">(R12192)</p>	<ul style="list-style-type: none"> ■ When reassembling, fasten the wires with screws on the terminal board.
<p>2. Remove the electrical box.</p> <p>1 Release the outdoor temperature thermistor.</p> <p>2 Lift up the guard net and remove it.</p>	<p style="text-align: right;">(R12193)</p> <p style="text-align: right;">(R8143)</p>	

Step	Procedure	Points
3	<p>Remove the 7 screws, and remove the right side panel.</p>  <p>Right side panel</p> <p>(R9365)</p>	
4	<p>Remove the screw of the terminal board.</p>  <p>Terminal strip</p> <p>(R9366)</p>	
5	<p>Disconnect the connectors of the drain pan heater.</p>  <p>(R9367)</p>	<p>■ Some models do not have a drain pan heater.</p>
6	<p>Cut the clamp.</p>  <p>(R9368)</p>	

Step	Procedure	Points
7	Disconnect the connector for the fan motor [S70].	<ul style="list-style-type: none"> ■ For removal procedure of the fan motor lead wire, refer to "Removal of Outdoor Fan / Fan Motor".
	 <p style="text-align: center;">[S70]</p>	
	(R0254)	
8	Disconnect the connector for the overload protector [S40].	
	 <p style="text-align: center;">[S40]</p>	
	(R0255)	
9	Disconnect the connector for the electronic expansion valve coil [S20].	
	 <p style="text-align: center;">[S20]</p>	
	(R0256)	
10	Disconnect the connector for the four way valve coil [S80].	
	 <p style="text-align: center;">[S80]</p>	
	(R0257)	

Step		Procedure	Points
11	Disconnect the connector for the thermistors [S90].	 <p>(R0258)</p>	
12	Disconnect the relay connector for the compressor.	 <p>(R0259)</p>	
13	Disconnect the 2 connectors for the reactor.	 <p>(R0260)</p>	

Step	Procedure	Points
14	Release the discharge pipe thermistor.	<p>■ Be careful not to lose the clip for the thermistor.</p>  <p>Clip</p> <p>(R12279)</p>
15	Detach the clamp for the thermistors from the electrical box.	 <p>(R12196)</p>
16	Remove the screw in front of the electrical box.	 <p>(R0263)</p>
17	Lift and remove the electrical box.	 <p>(R0264)</p>

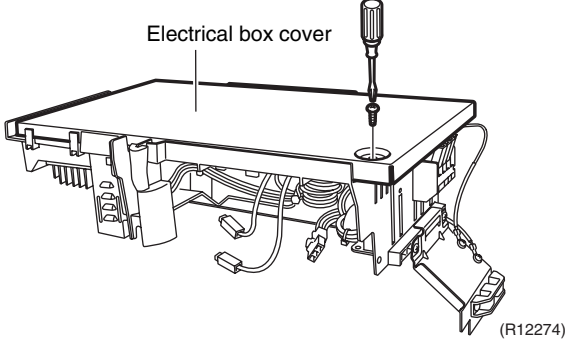
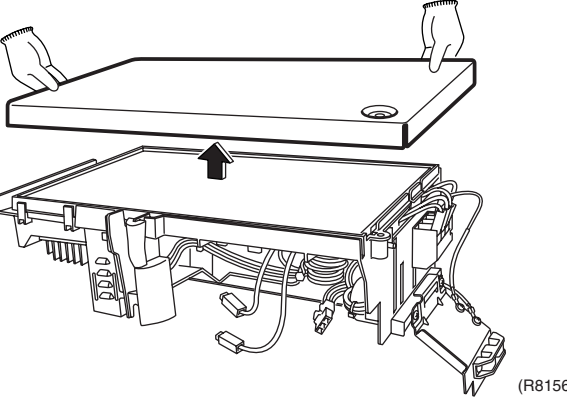
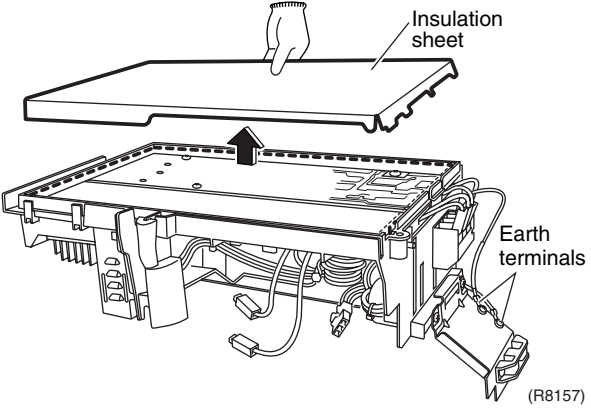
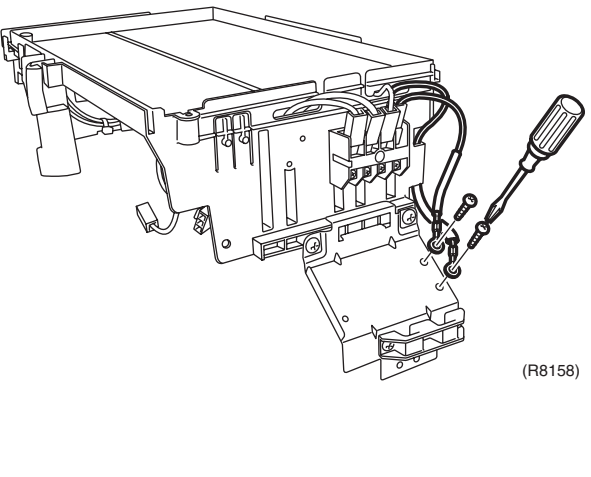
3. Removal of PCB

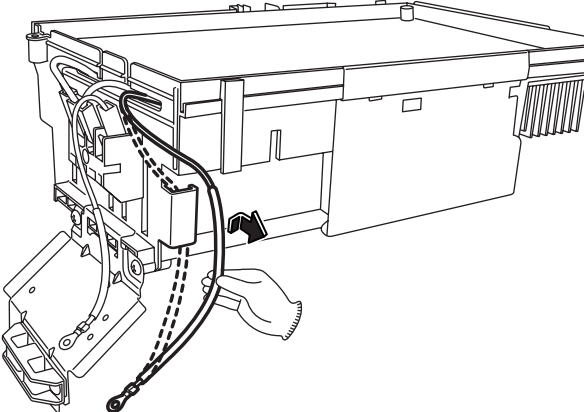
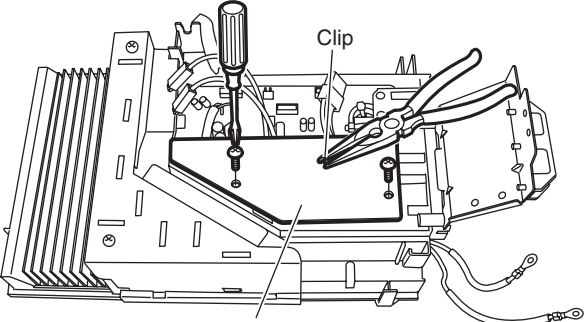
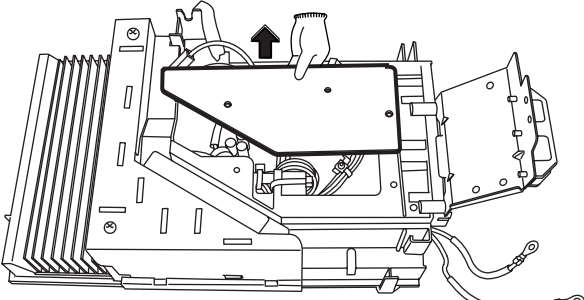
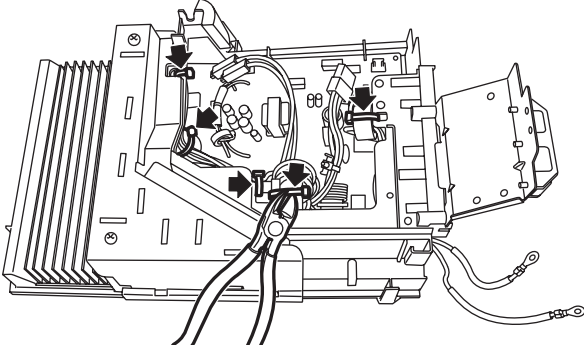
Procedure

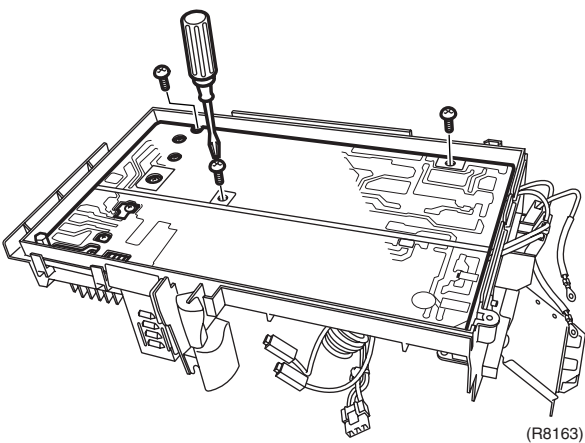
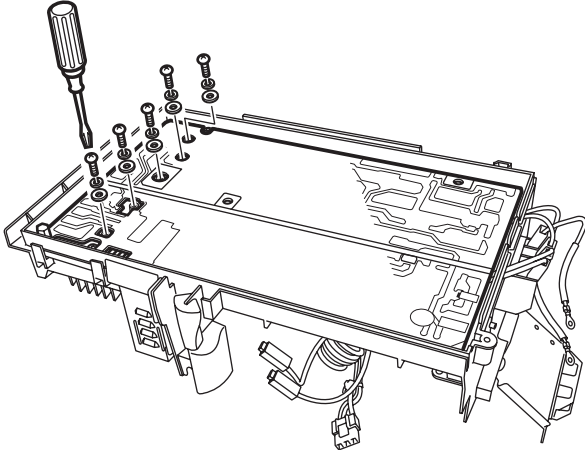
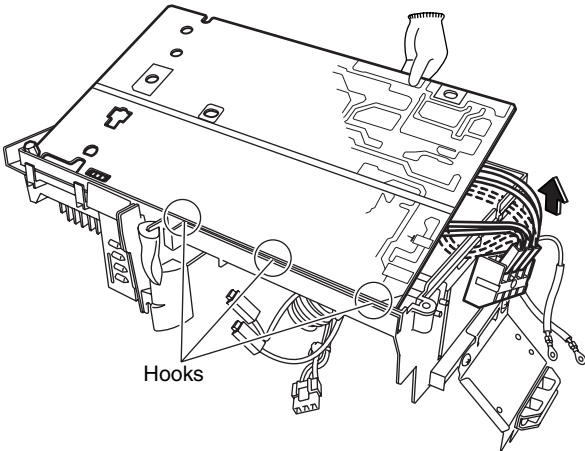
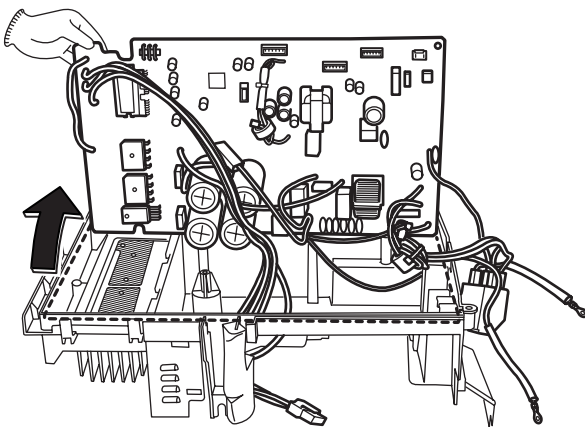


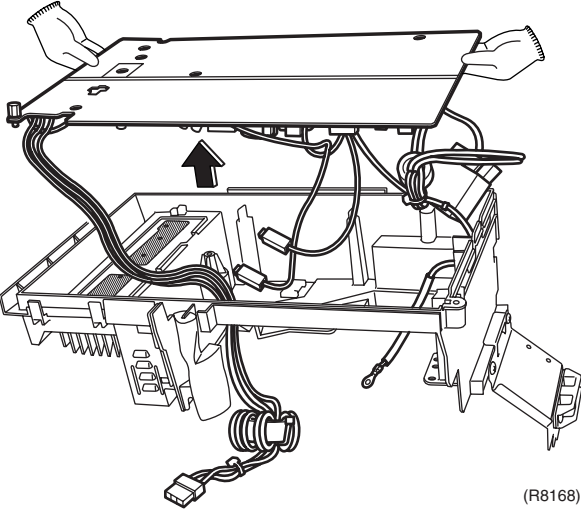
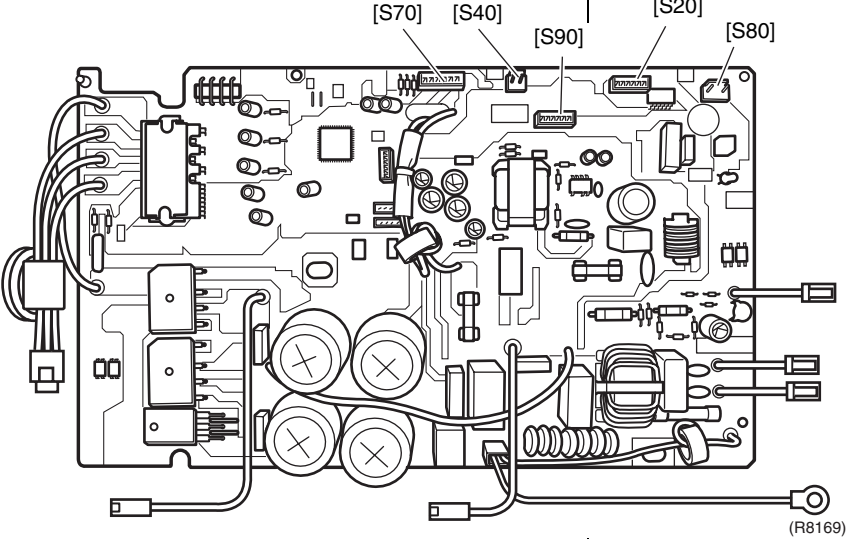
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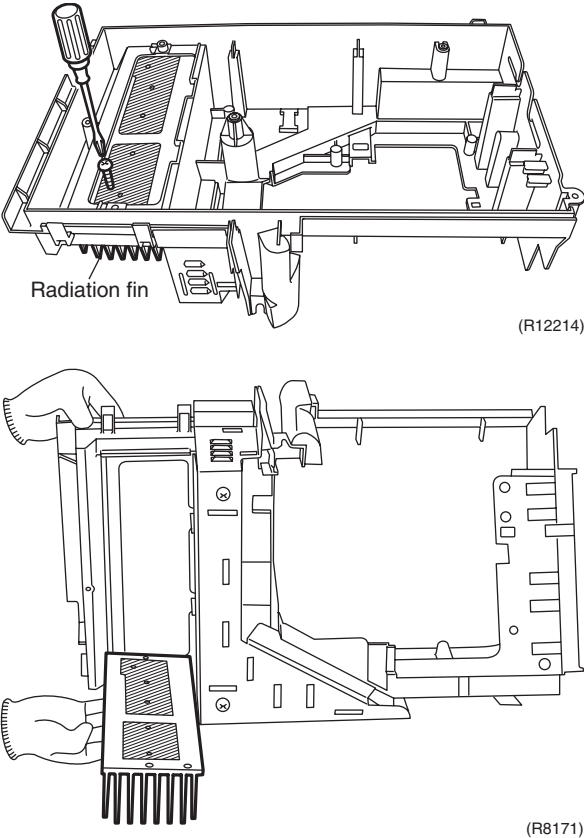
Be sure to wait 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1	<p>Remove the screw and remove the electrical box cover.</p>  	<p>Preparation</p> <ul style="list-style-type: none"> ■ Remove the panels according to the “Removal of Outer Panels”. ■ Remove the electrical box according to the “Removal of Electrical Box”.
2	<p>Detach the insulation sheet.</p> 	<ul style="list-style-type: none"> ■ The trimmed part goes front.
3	<p>Remove the 2 screws of the earth terminals.</p> 	

Step	Procedure	Points
4	Release the earth wire from the hook.	
	 <p>(R8159)</p>	
5	Remove the 2 screws and detach the 1 clip to remove the radiation shield plate.	
	 <p>(R12198)</p>	
	 <p>(R8161)</p>	
6	Cut off the 5 clamps and disconnect the wire harnesses.	
	 <p>(R8162)</p>	

Step	Procedure	Points
7	Remove the 8 screws in total to remove the PCB.	
	 <p>(R8163)</p>  <p>(R8164)</p>	
8	Lift up the back side slightly and unfasten the hooks of the front.	<ul style="list-style-type: none"> When reassembling, make sure that the hooks of the electrical box are placed on the PCB.
	 <p>Hooks</p> <p>(R8166)</p>	
9	Lift up the PCB.	
	 <p>(R8167)</p>	

Step	Procedure	Points
10	Remove the PCB.  <p>(R8168)</p>	
11	Detach the terminals from the terminal board.  <p>(R8169)</p>	<p>[S20] : electronic expansion valve coil [S40] : overload protector [S70] : fan motor [S80] : four way valve coil [S90] : thermistors</p>

Step	Procedure	Points
12	Remove the screw of the radiation fin.	
	 <p data-bbox="517 546 635 575">Radiation fin</p> <p data-bbox="1007 584 1075 607">(R12214)</p> <p data-bbox="1015 1088 1075 1111">(R8171)</p>	

4. Removal of Partition Plate / Sound Blankets

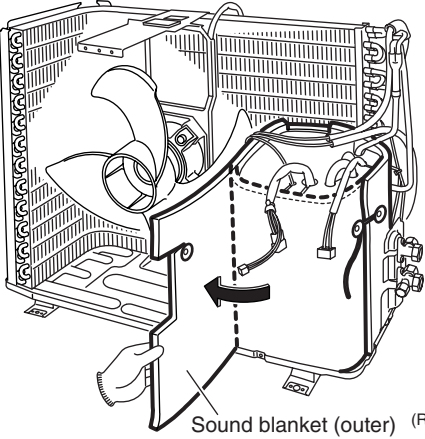
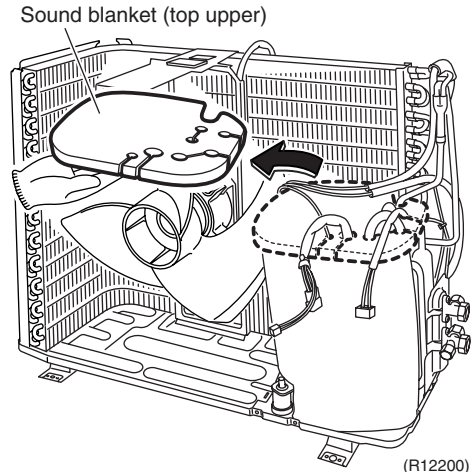
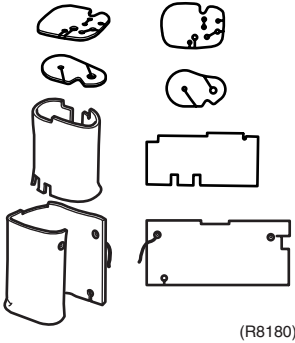
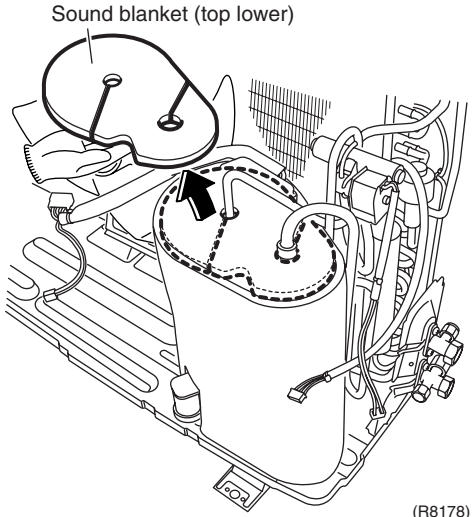
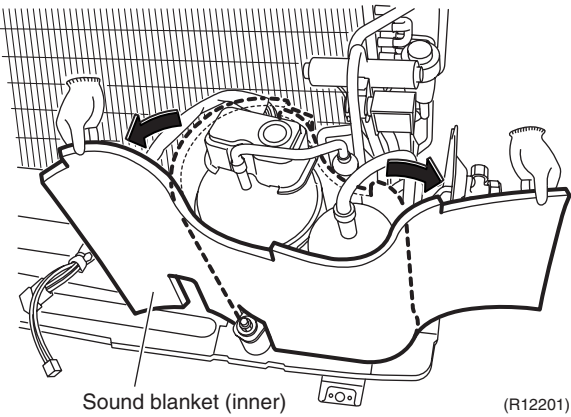
Procedure



Warning

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Step	Procedure	Points
1. Remove the partition plate.	<p style="text-align: right;">(R12282)</p>	<ul style="list-style-type: none"> ■ When reassembling, fit the lower hooks into the bottom frame.
1 Remove the 2 screws.	<p style="text-align: right;">(R14110)</p>	<p style="text-align: right;">(R14111)</p>
2 The partition plate has hooks on the lower side. Lift and pull the partition plate to remove.	<p style="text-align: right;">(R13802)</p>	<p style="text-align: right;">(R13802)</p> <ul style="list-style-type: none"> ■ Some models have notches on the lower side of the partition plate. ■ When reassembling, pass the drain pan heater cable through the notch.
3 Remove the screw to remove the reactor.		

Step	Procedure	Points
2. Remove of the sound blanket.		
1 Untie the string, open the sound blanket (outer) and pull it out.	 <p>Sound blanket (outer) (R12199)</p>	<ul style="list-style-type: none"> Since the piping ports are torn easily, remove the blanket carefully.
2 Remove the sound blanket (top upper).	 <p>Sound blanket (top upper)</p> <p>(R12200)</p>	 <p>(R8180)</p>
3 Remove the sound blanket (top lower).	 <p>Sound blanket (top lower)</p> <p>(R8178)</p>	<ul style="list-style-type: none"> The design of the sound blankets is different depending on the models.
4 Open the sound blanket (inner) and pull it out.	 <p>Sound blanket (inner) (R12201)</p>	

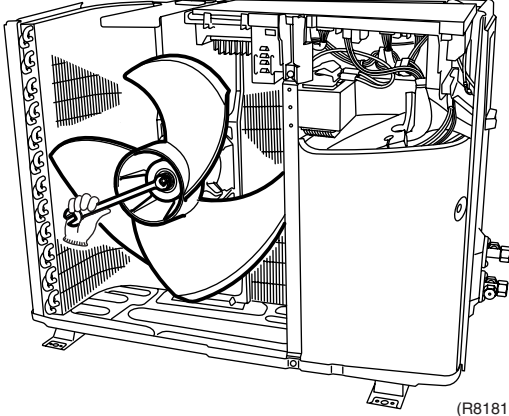
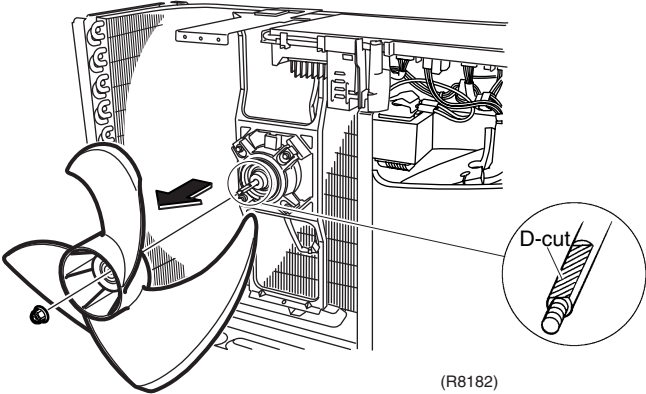
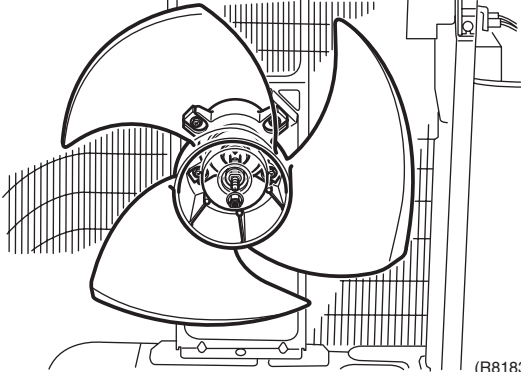
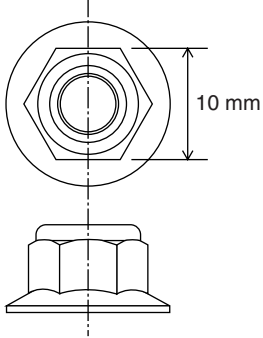
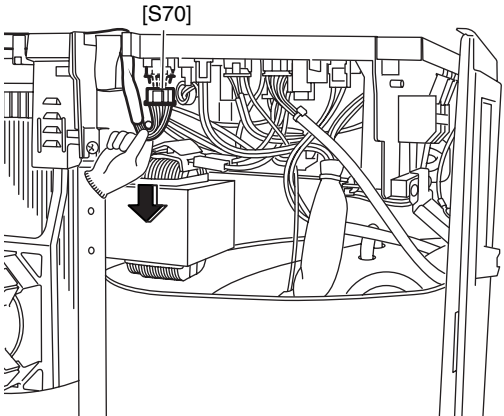
5. Removal of Outdoor Fan / Fan Motor

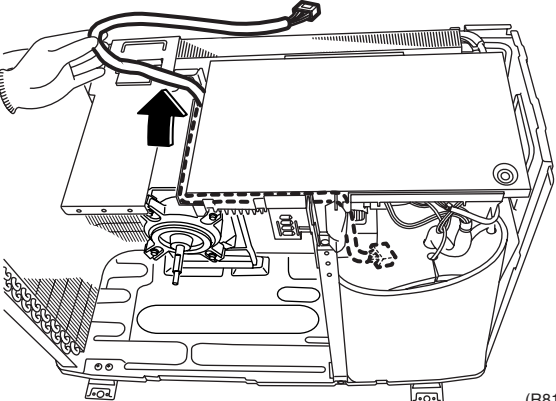
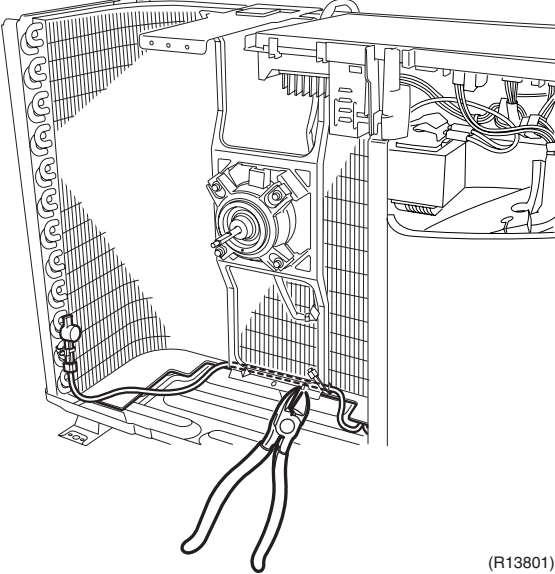
Procedure

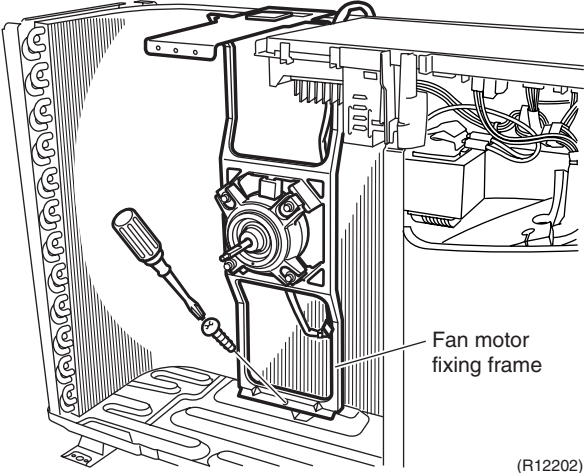
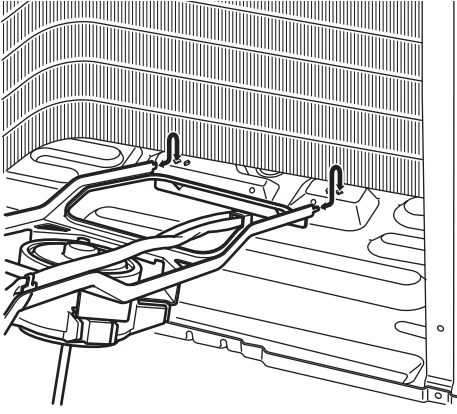
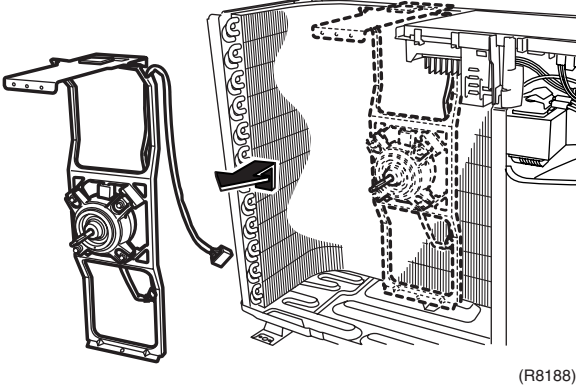


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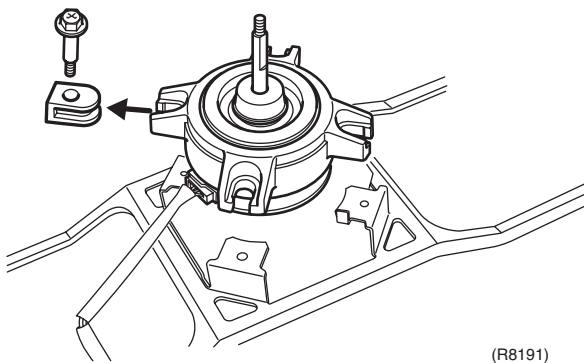
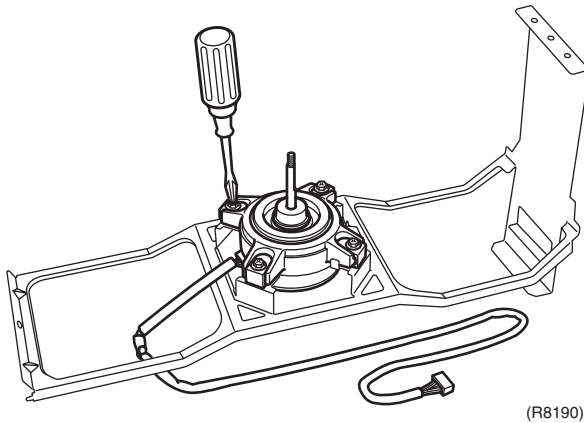
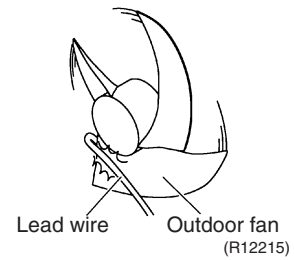
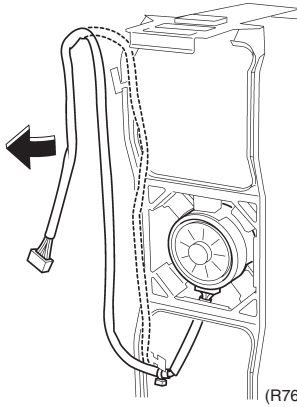
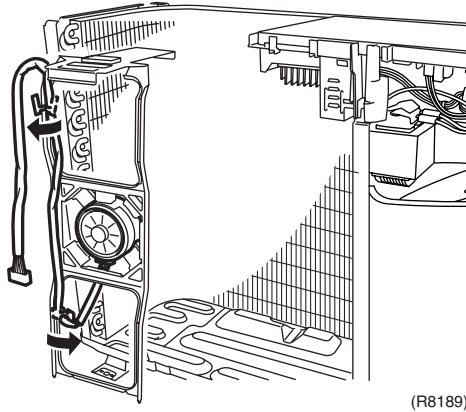
Be sure to wait 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
<p>1. Remove the outdoor fan.</p> <p>1 Remove the washer fitted nut of the outdoor fan.</p> <p>2 Remove the outdoor fan.</p>	 <p>(R8181)</p>  <p>(R8182)</p>  <p>(R8183)</p>	<p>■ Nut size: M6</p>  <p>10 mm</p> <p>(R12236)</p> <p>■ When reassembling, align the ▼ mark of the outdoor fan with the D-cut section of the motor shaft.</p>
<p>2. Remove the fan motor.</p> <p>1 Disconnect the connector for the fan motor [S70].</p>	 <p>[S70]</p> <p>(R8184)</p>	

Step	Procedure	Points
2	<p>The figure shows the arrangement of the fan motor lead wire.</p>  <p>(R8185)</p>	
3	<p>Cut the clamp.</p>  <p>(R13801)</p>	<p>■ Some models do not have clamps.</p>

Step	Procedure	Points
4	Remove the 1 screw of the fan motor fixing frame.	
	 <p data-bbox="919 568 1034 618">Fan motor fixing frame</p> <p data-bbox="1007 696 1075 719">(R12202)</p>  <p data-bbox="999 1151 1059 1173">(R8187)</p>	
5	Remove the fan motor fixing frame.	
	 <p data-bbox="1007 1585 1075 1608">(R8188)</p>	

Step	Procedure	Points
6	Turn the fan motor fixing frame backward and open the 2 hooks of the fan motor lead wire.	
7	Release the fan motor lead wire.	<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).
8	Remove the 4 screws and 4 rubber vibration isolators to remove the fan motor.	



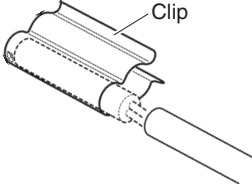
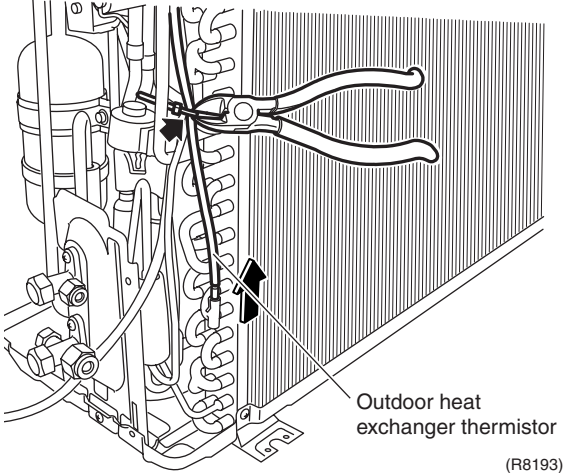
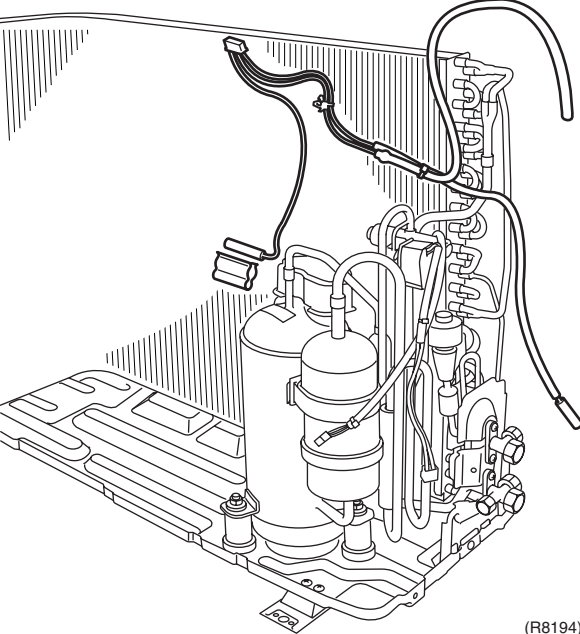
6. Removal of Thermistors

Procedure



Warning

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

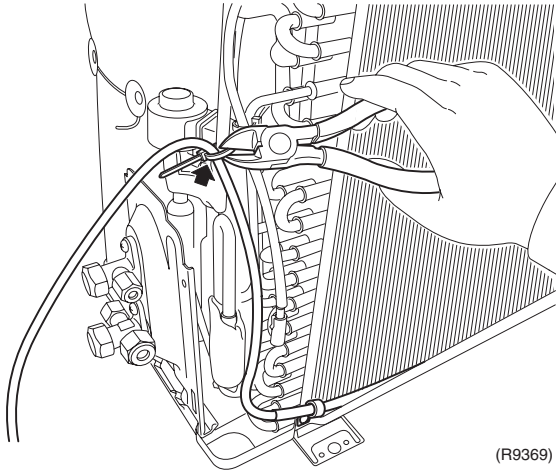
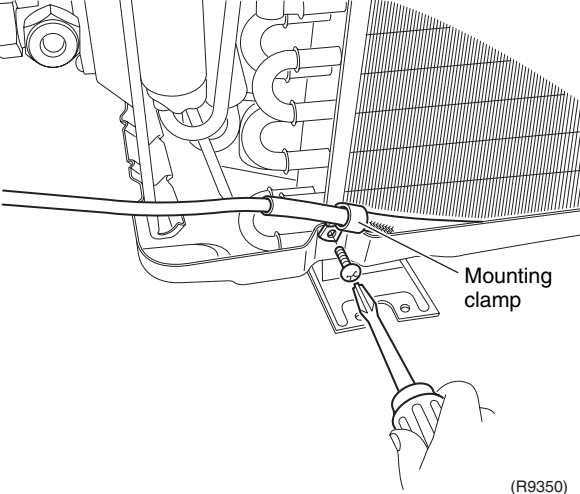
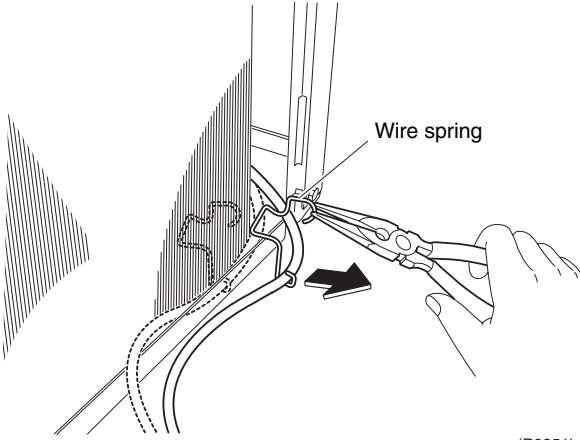
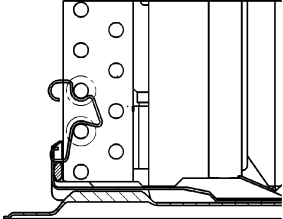
Step	Procedure	Points
1	Release the discharge pipe thermistor.	<p>■ Be careful not to lose the clip for the thermistor.</p>  <p>(R12279)</p>
2	Cut the clamp and pull out the outdoor heat exchanger thermistor.	 <p>(R8193)</p>
3	The thermistors for outdoor temperature / discharge pipe / outdoor heat exchanger are united as one assembly.	 <p>(R8194)</p>
4	The figure shows the arrangement of the thermistors.	

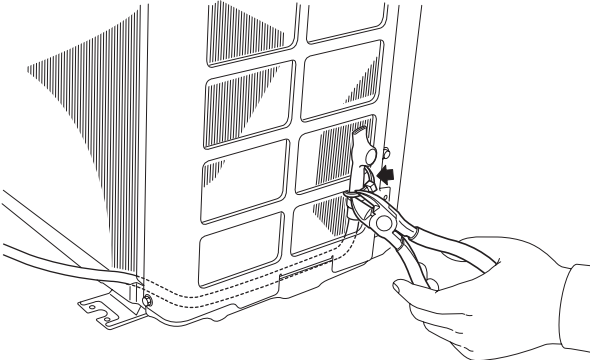
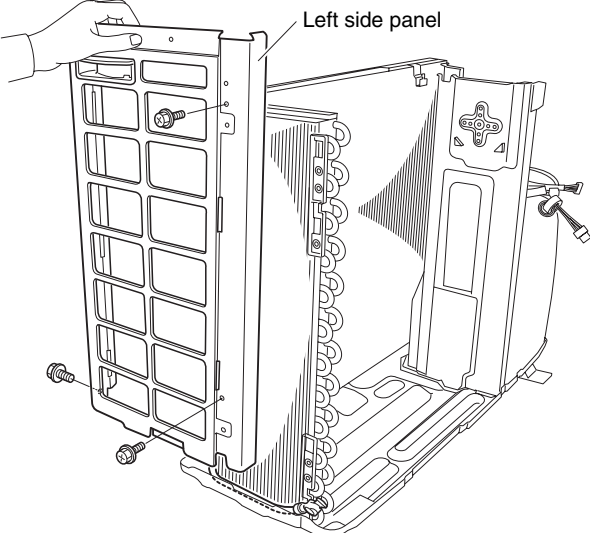
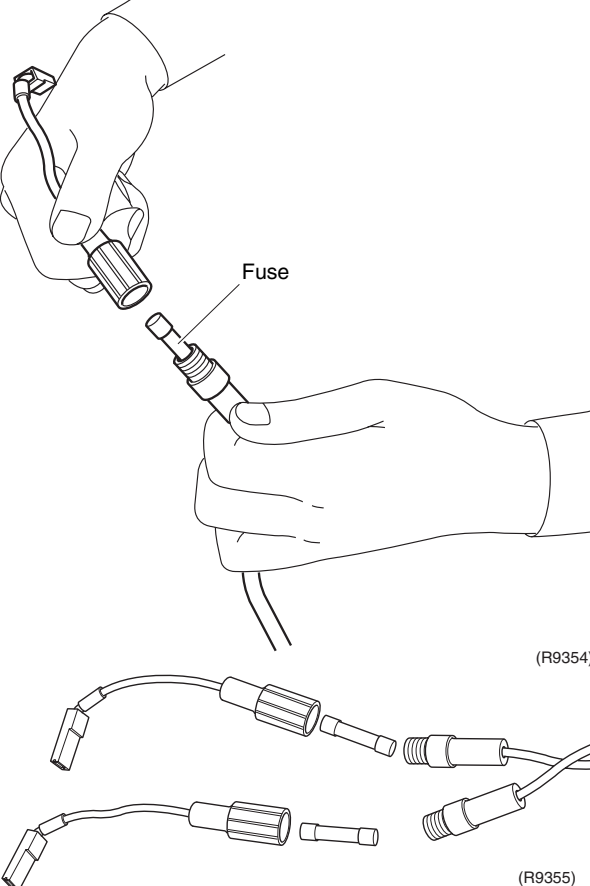
7. Removal of Drain Pan Heater ASSY (Pattern 1)

Procedure



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

Step	Procedure	Points
1	Cut the clamp.  <p style="text-align: right;">(R9369)</p>	<ul style="list-style-type: none"> ■ Some models do not have a drain pan heater ASSY. ■ You can remove the drain pan heater ASSY with the sound blanket on.
2	Remove the screw of the mounting clamp.  <p style="text-align: right;">(R9350)</p>	
3	Release the drain pan heater ASSY from the ditch between the bottom frame and the outdoor heat exchanger ASSY. Remove the wire spring with long nose pliers.  <p style="text-align: right;">(R9351)</p>	<ul style="list-style-type: none"> ■ Take care not to cut your finger by the fins of the outdoor heat exchanger. ■ When reassembling, hang the wire spring to the hair pin cooling tube.  <p style="text-align: right;">(R9748)</p>

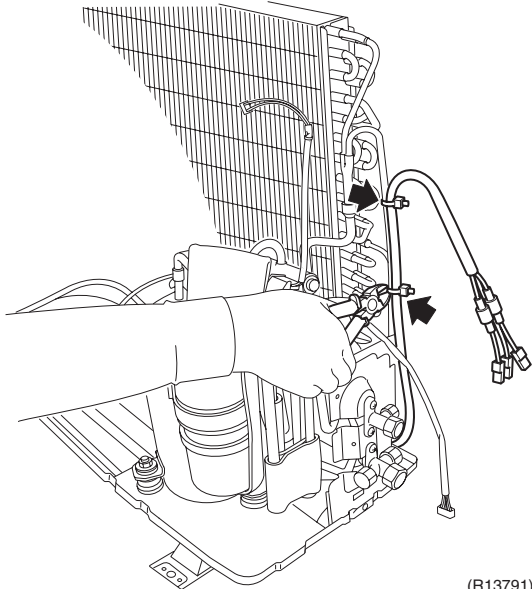
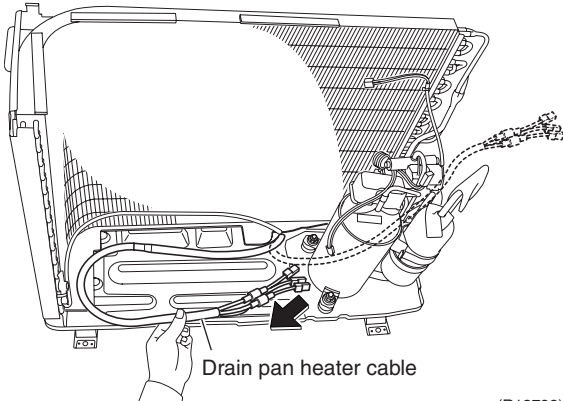
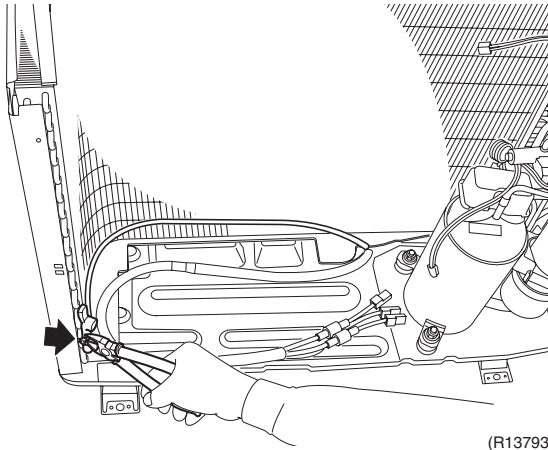
Step	Procedure	Points
4	Cut the clamp.	
	 <p>(R9352)</p>	
5	Remove the 3 screws and remove the left side panel.	
	 <p>Left side panel</p> <p>(R12307)</p>	
6	The fuses are inside the drain pan heater.	
	 <p>Fuse</p> <p>(R9354)</p> <p>(R9355)</p>	

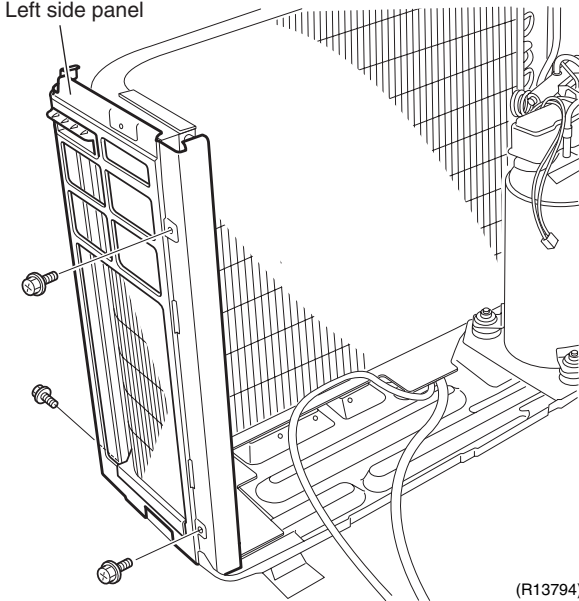
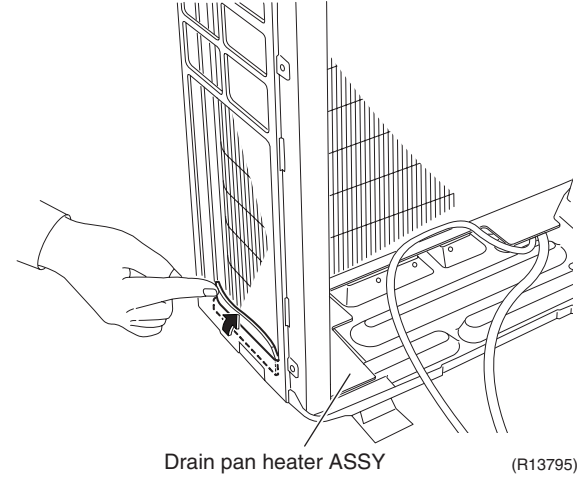
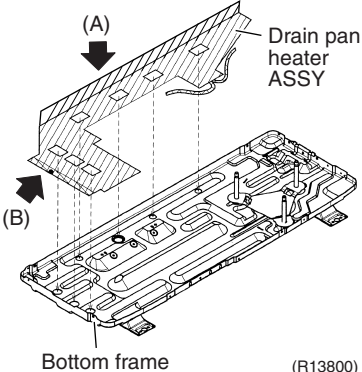
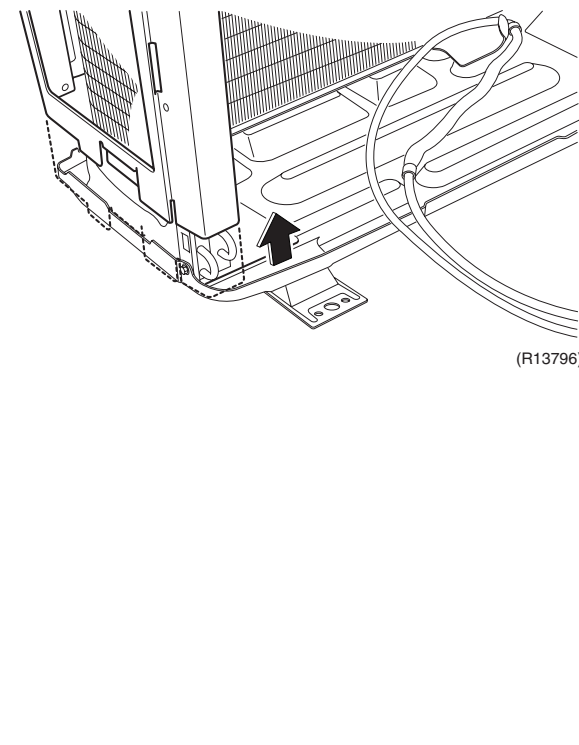
8. Removal of Drain Pan Heater ASSY (Pattern 2)

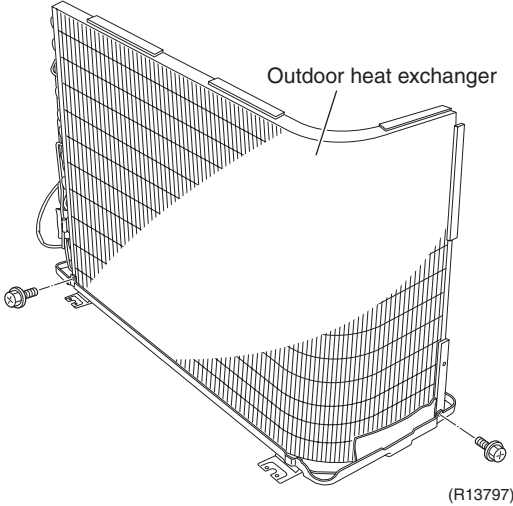
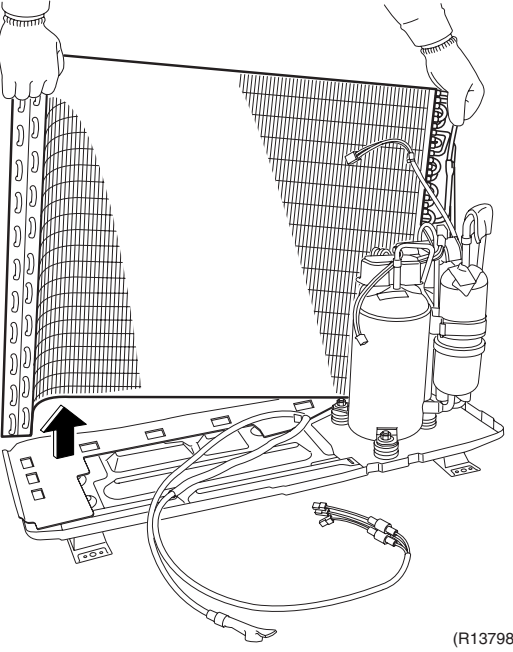
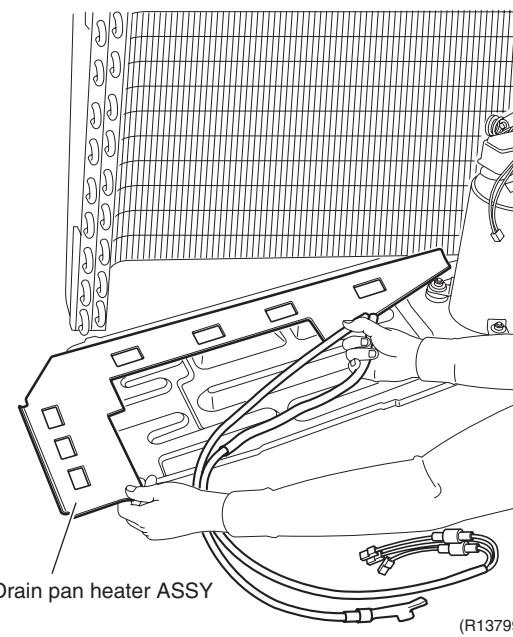
Procedure



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

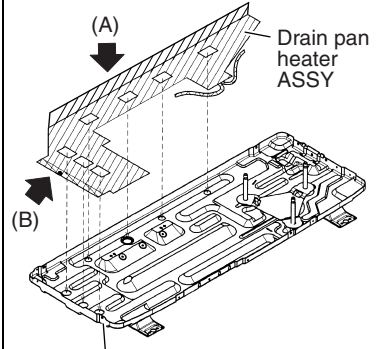
Step	Procedure	Points
1	Cut the 2 clamps.  <p style="text-align: right;">(R13791)</p>	<ul style="list-style-type: none"> ■ Some models do not have a drain pan heater ASSY. <p>Preparation</p> <ul style="list-style-type: none"> ■ Remove the sound blankets according to the “Removal of Partition Plate / Sound Blankets”.
2	Pull out the drain pan heater cable under the compressor.  <p style="text-align: right;">(R13792)</p>	
3	Cut the clamp.  <p style="text-align: right;">(R13793)</p>	

Step	Procedure	Points
4	<p>Remove the 3 screws of the left side panel.</p>  <p>Left side panel</p> <p>(R13794)</p>	
5	<p>Lift up the aluminum part of the drain pan heater ASSY.</p>  <p>Drain pan heater ASSY</p> <p>(R13795)</p>	<ul style="list-style-type: none"> ■ Lift up the aluminum part (A) and (B) at the back and left.  <p>Bottom frame (R13800)</p>
6	<p>Remove the left side panel.</p>  <p>(R13796)</p>	<ul style="list-style-type: none"> ■ When reassembling, fold back the aluminum part (A) and (B) along the bottom frame.

Step	Procedure	Points
7	Remove the 2 screws from the outdoor heat exchanger.	 <p>Outdoor heat exchanger</p> <p>(R13797)</p>
8	Lift the outdoor heat exchanger.	 <p>(R13798)</p>
9	Peel off the drain pan heater ASSY.	 <p>Drain pan heater ASSY</p> <p>(R13799)</p>

Caution
 When dismantling or mounting the outdoor heat exchanger, be sure to wear gloves or wrap it with cloth before proceeding. (You may be injured by the fins.)

■ When reassembling, match the drain pan heater ASSY with the holes of the bottom frame.



Drain pan heater ASSY

Bottom frame (R13800)

■ When reassembling, fold back the aluminum part (A) and (B) along the bottom frame.

■ The back side of drain pan heater ASSY is adhesive.

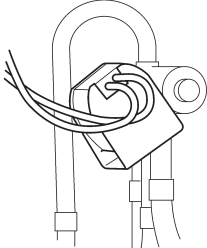
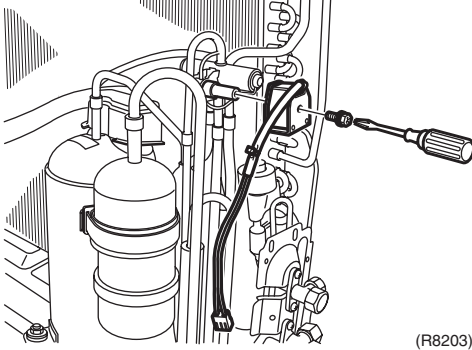
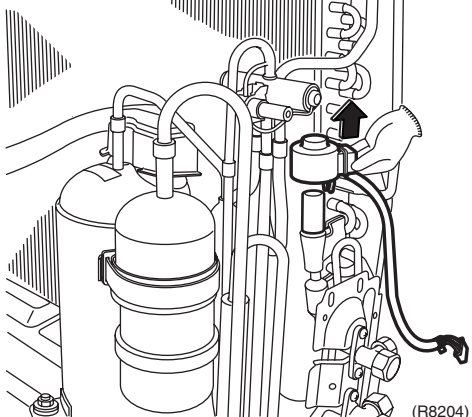
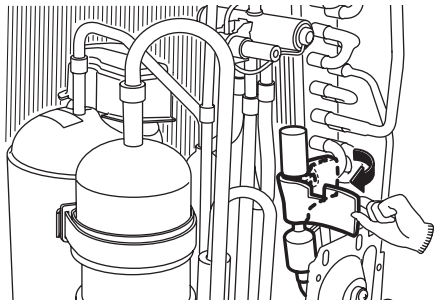
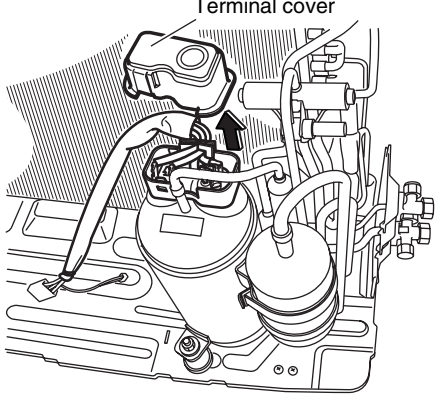
9. Removal of Four Way Valve / Electronic Expansion Valve

Procedure

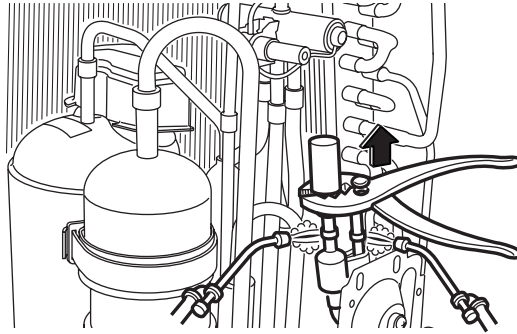


Warning

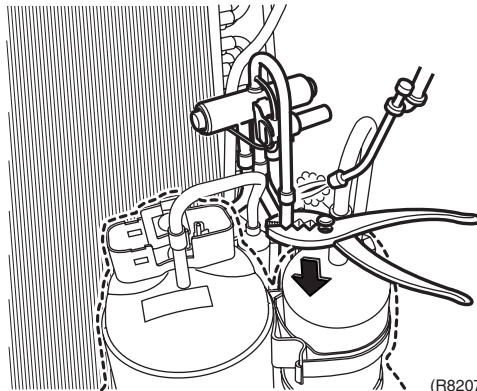
Be sure to wait 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1.	Remove the peripheries.	Preparation
1	Remove the screw and remove the four way valve coil.	<ul style="list-style-type: none"> ■ Remove the sound blanket.  <p style="text-align: right;">(R7703)</p>
2	Pull out the electronic expansion valve coil.	<ul style="list-style-type: none"> ■ Detach the four way valve coil and the 2 clamps, and then detach the wire harnesses.
3	Remove the putty.	 <p style="text-align: right;">(R8203)</p>  <p style="text-align: right;">(R8204)</p>  <p style="text-align: right;">(R8205)</p>
4	Remove the terminal cover.	 <p style="text-align: right;">(R8195)</p>

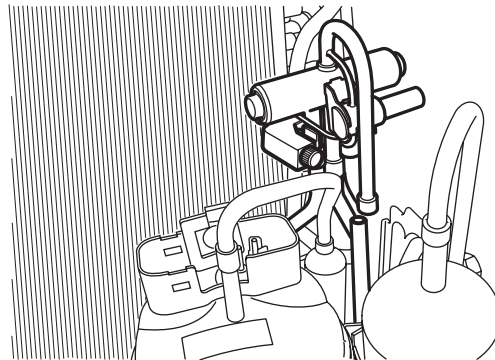
Step	Procedure	Points
<ul style="list-style-type: none"> ■ Before working, make sure that the refrigerant gas is empty in the circuit. ■ Be sure to apply nitrogen replacement when heating up the brazed part. 		<p>Warning Be careful not to get yourself burnt with the pipes and other parts that are heated by the gas brazing machine.</p>
2.	Remove the four way valve and electronic expansion valve.	
1	Heat up the 2 brazed parts of the electronic expansion valve and remove it.	<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>
2	Heat up the brazed parts of the four way valve.	<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.
3	Pull the pipe with pliers and disconnect.	<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.



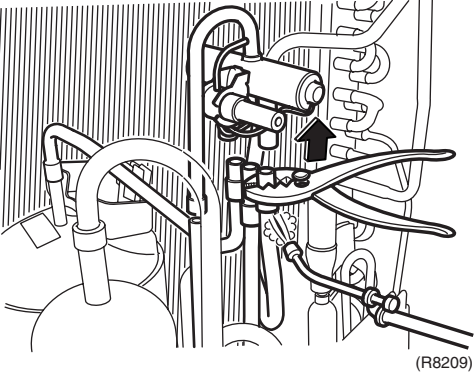
(R8206)



(R8207)



(R8208)

Step	Procedure	Points
	 <p>(R8209)</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.

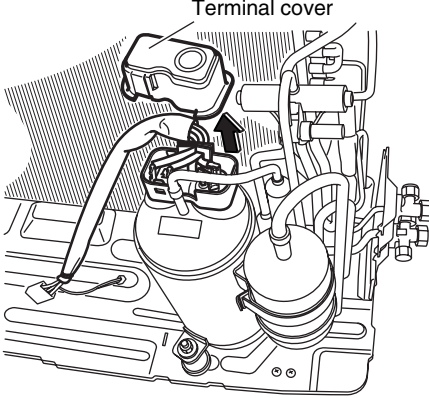
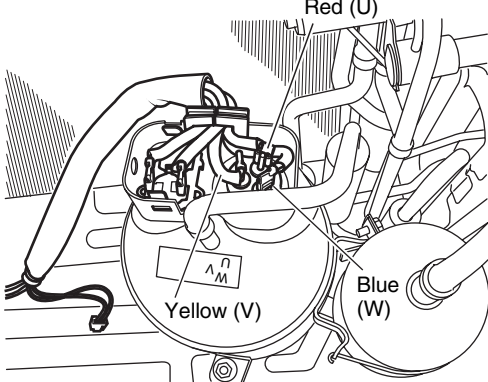
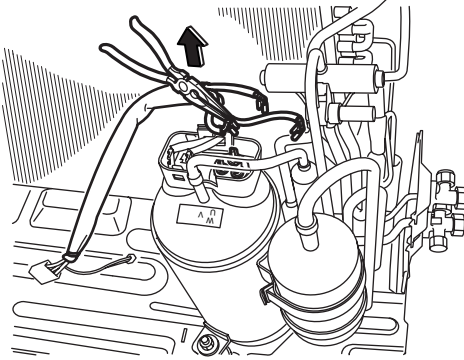
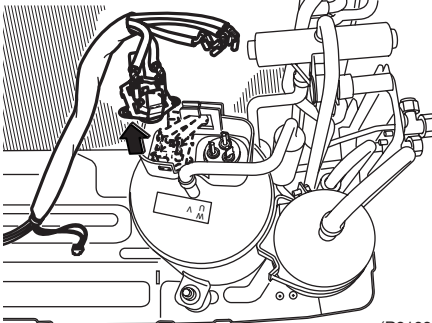
10. Removal of Compressor

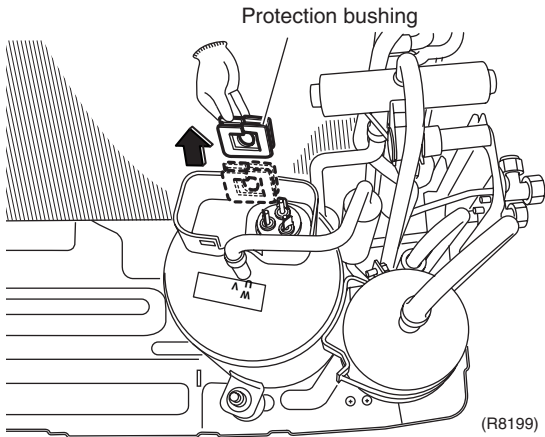
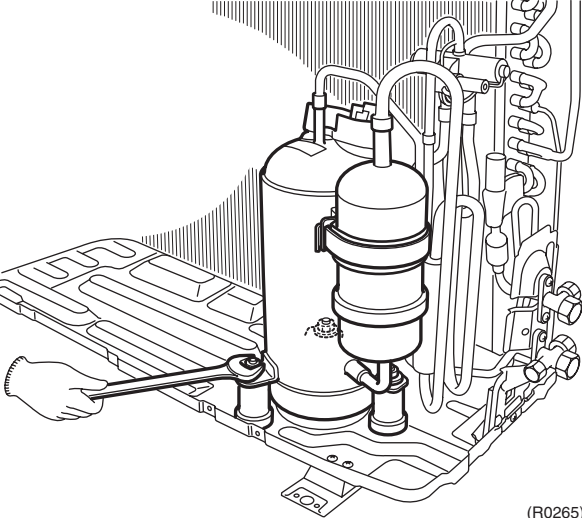
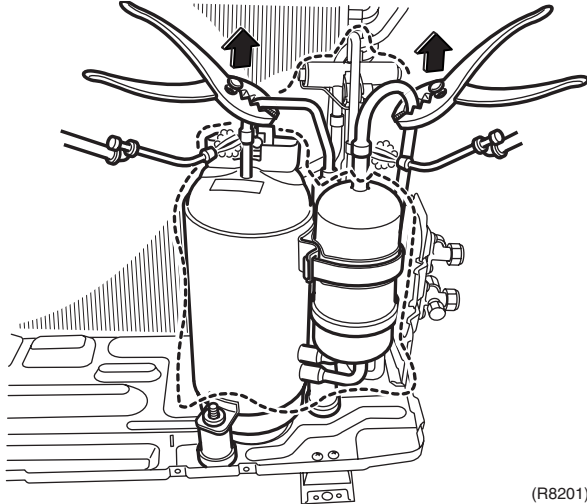
Procedure

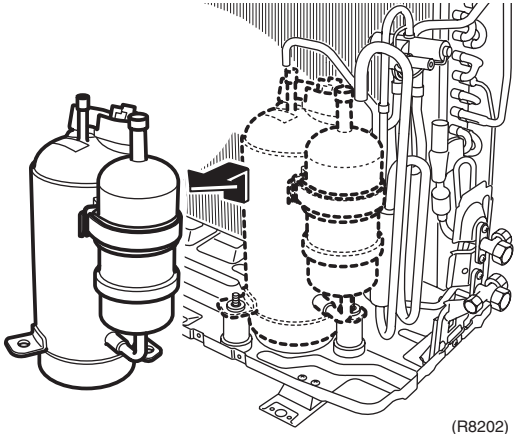


Warning

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

Step	Procedure	Procedure	Points
1	Remove the terminal cover.	 <p style="text-align: center;">Terminal cover</p> <p style="text-align: right;">(R8195)</p>	
2	Disconnect the lead wires of the compressor.	 <p style="text-align: center;">Red (U)</p> <p style="text-align: center;">Yellow (V) Blue (W)</p> <p style="text-align: right;">(R8196)</p>  <p style="text-align: right;">(R8197)</p>	
3	Unfasten the hooks with a flat screwdriver to remove the overload protector.	 <p style="text-align: right;">(R8198)</p>	

Step	Procedure	Points
4	<p>Remove the protection bushing.</p>  <p style="text-align: right;">(R8199)</p>	
5	<p>Remove the 2 nuts of the compressor.</p>  <p style="text-align: right;">(R0265)</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>
6	<p>Heat up the brazed part of the discharge side and disconnect.</p> <p>7 Heat up the brazed part of the suction side and disconnect.</p>  <p style="text-align: right;">(R8201)</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> <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>

Step	Procedure	Points
8	<p>Lift the compressor up to remove.</p>  <p>(R8202)</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>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. ■ Be careful so as not to burn the compressor terminals, the name plate, the heat exchanger fin.

Revision History

Month / Year	Version	Revised contents
01 / 2013	Si001070	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

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/global_ac/

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