



Si00-979

REMOVAL PROCEDURE



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

9000/12000/15000 Btu/h Class

-  Outdoor Unit
-  Inverter
-  Pair Type



Service Manual Removal Procedure

Outdoor Unit

●Heat Pump

RXG09HVJU

RXG12HVJU

RXG15HVJU

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Note:

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

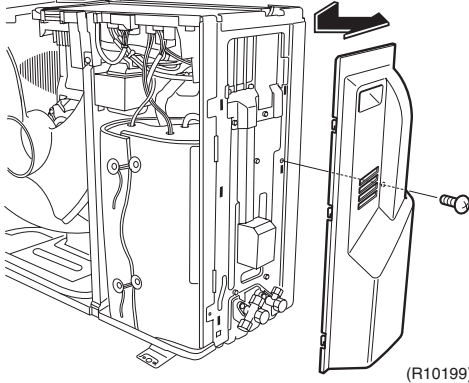
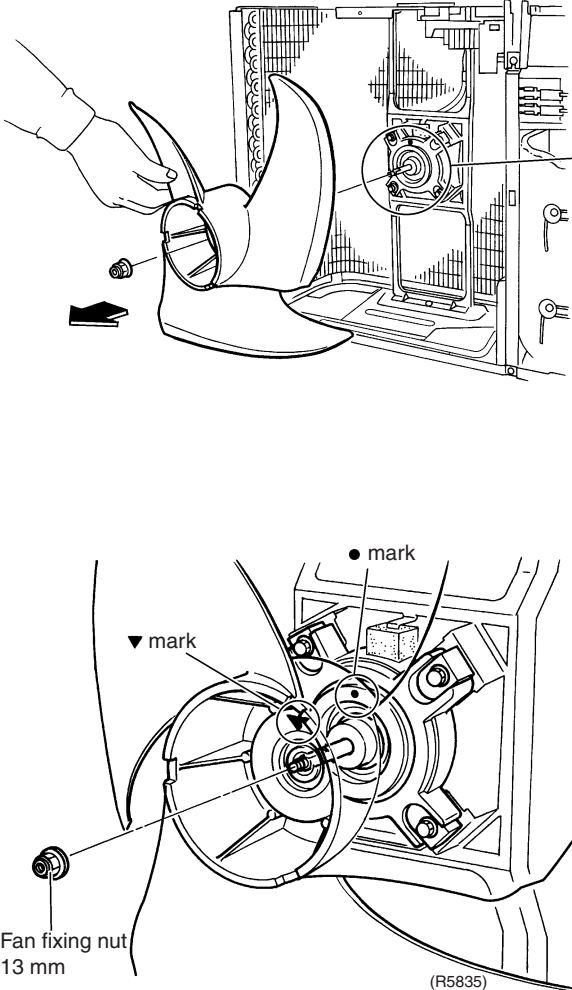
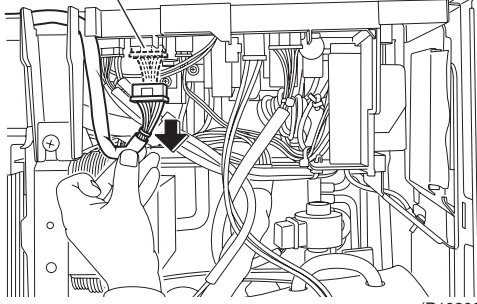
1. Removal of Outdoor Fan / Fan Motor

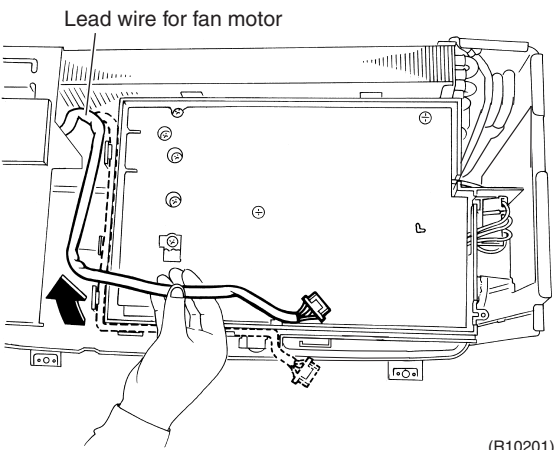
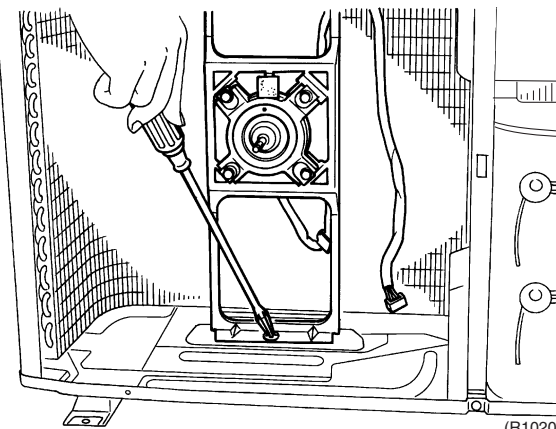
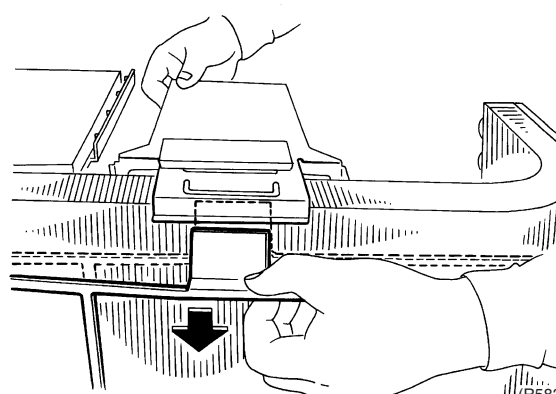
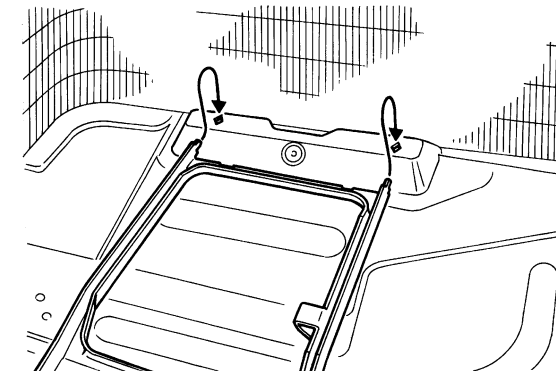
Procedure

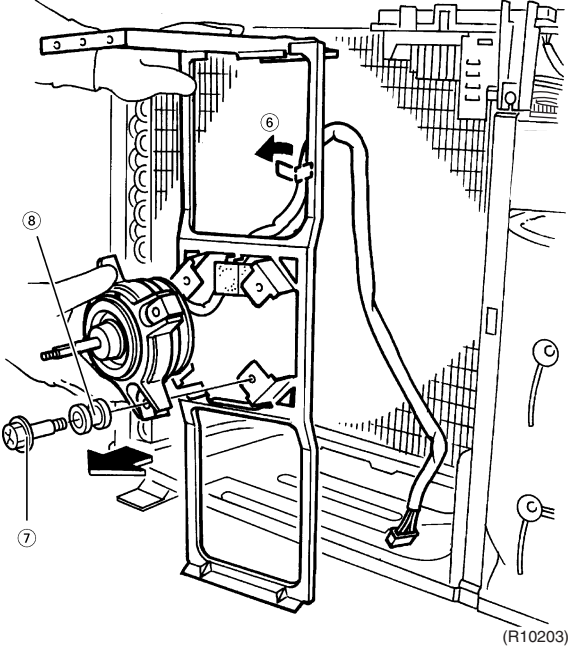
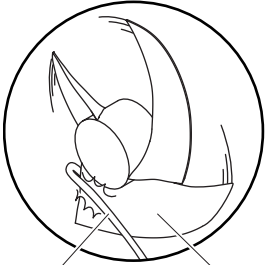


Warning Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
<p>1. Removal of the top panel</p> <p>1 Remove the 2 screws of the top panel.</p>	<p style="text-align: right;">(R10197)</p>	
<p>2. Remove the front panel</p> <p>1 Remove the 7 screws of the front panel. There are 5 hooks in total of right and left. Lift the front panel and pull it out toward yourself.</p> <p>2 Remove the 4 screws to remove the front grille.</p>	<p style="text-align: right;">(R10196)</p> <p style="text-align: right;">(R10198)</p>	

Step	Procedure	Points
3	Remove the screw and remove the stop valve cover.  (R10199)	
3. Removal of the propeller fan 1	Remove the fan fixing nut and remove the propeller fan.  (R5833) (R5834) (R5835)	<ul style="list-style-type: none"> ■ When assembling, align the ▼ mark of the outdoor fan and the D cut section of the motor shaft. ■ When assembling the fan motor, let the ● mark go upper. (The direction of the lead wire outlet.) ■ Remove the fan fixing nut with the 13 mm wrench.
4. Removal of the fan motor	1 Disconnect the fan motor connector [S70] from PCB.  (R10200)	

Step	Procedure	Points
2	<p>Detach the lead wire for fan motor and pass the lead wire downward through the opening.</p>  <p>(R10201)</p>	
3	<p>Remove the screw of the fan motor fixing plate.</p>  <p>(R10202)</p>	
4	<p>Detach the upper part of the fan motor fixing plate.</p>  <p>(R5839)</p>	
5	<p>Fan motor fixing plate has the 2 hooks on lower part.</p>  <p>(R5840)</p>	

Step	Procedure	Points
<p>6 Release the fixing hook for lead wire and detach the lead wire.</p> <p>7 Remove the 4 screws of the fan motor.</p> <p>8 Pull out the rubber vibration isolators sideward.</p>	 <p>(R10203)</p>	 <p>Lead wire Propeller fan (R3249)</p> <ul style="list-style-type: none"> ■ When assembling, put the lead wire through the back of the motor. (so as not to be entangled with the propeller fan)

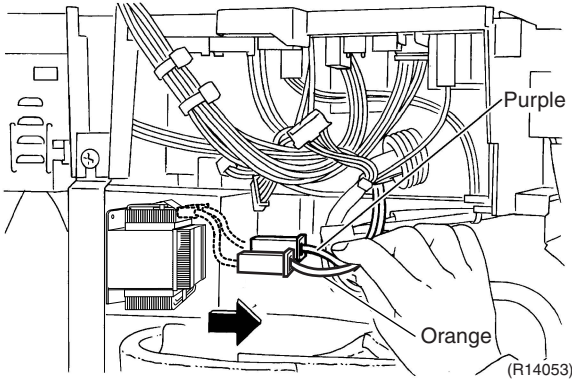
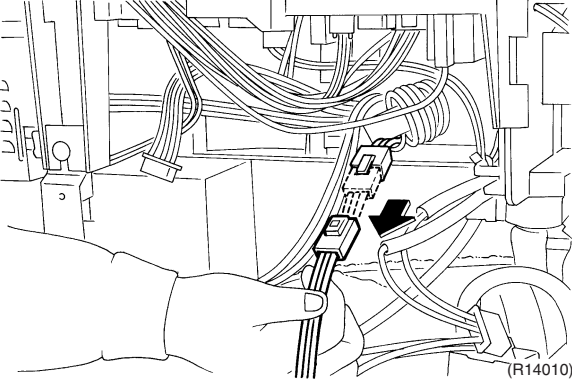
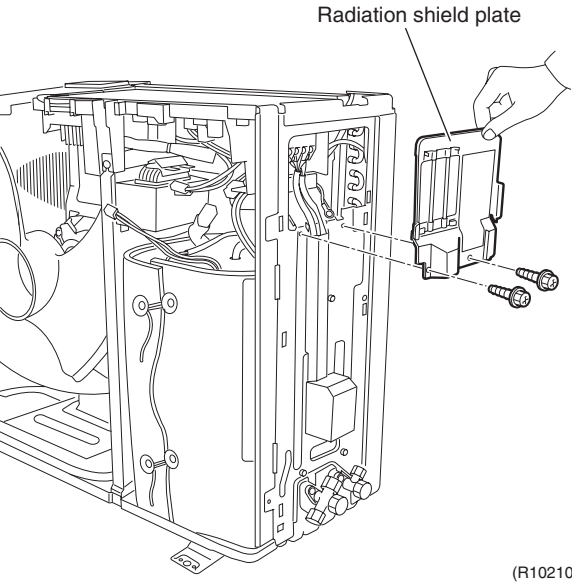
2. Removal of Electrical Box

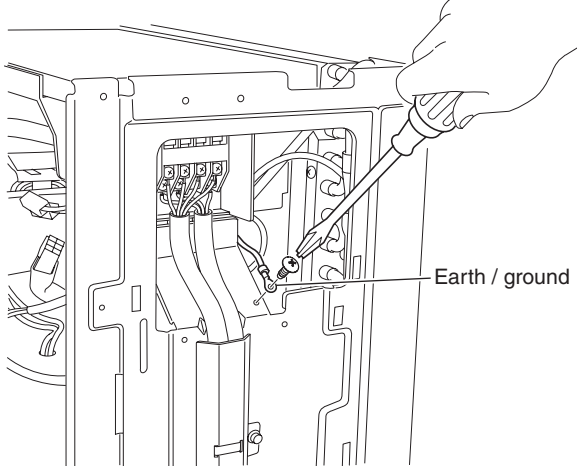
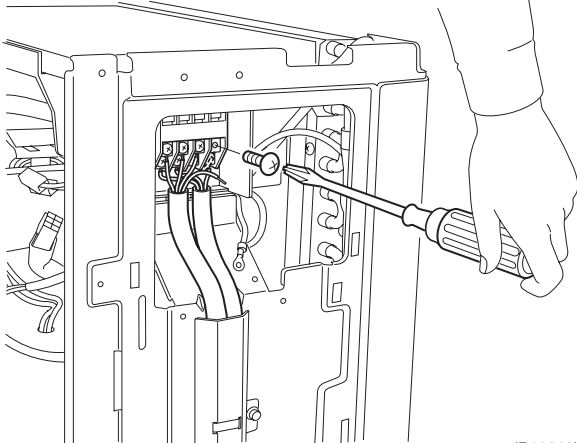
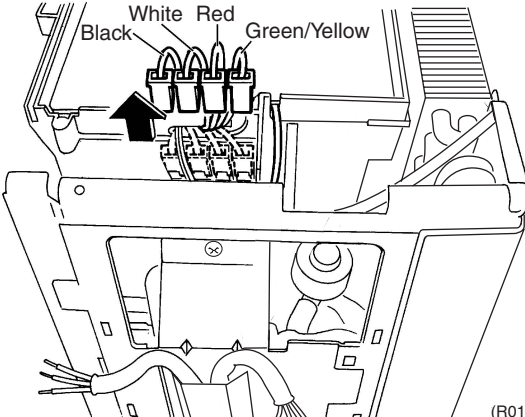
Procedure

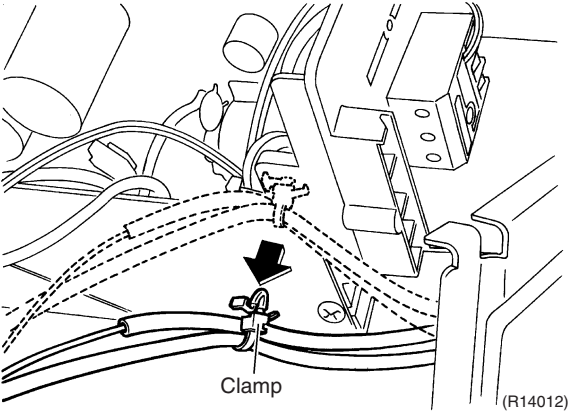
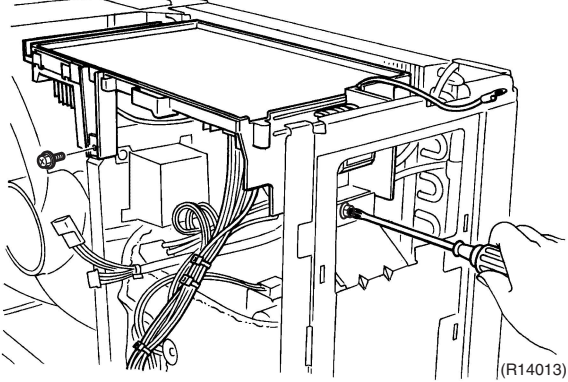
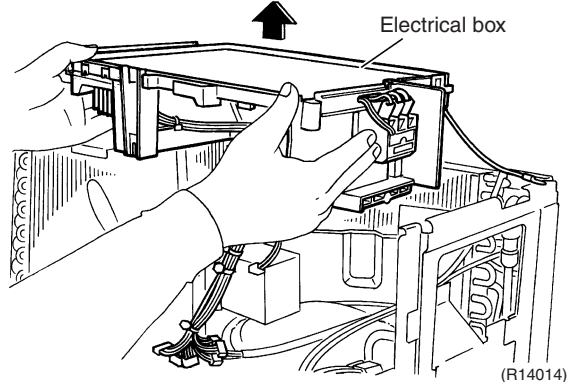


Warning Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1. Disconnect the wire harnesses of the PCB		<p>Preparation</p> <ul style="list-style-type: none"> Remove the front panel according to "Removal of Outdoor Fan / Fan Motor".
1	Disconnect the connector for the fan motor [S70].	
2	Disconnect the connector for the four way valve coil [S80].	
3	Disconnect the connector for the electronic expansion valve coil [S20].	
4	Disconnect the connector for the thermistor assembly [S90].	

Step	Procedure	Points
<p>5</p> <p>Disconnect the 2 terminals from the reactor.</p>		
<p>6</p> <p>Disconnect the relay harness for the compressor.</p>		
<p>2. Disconnect the power supply / connecting wiring</p> <p>1</p> <p>Remove the 2 screws of the radiation shield plate to remove.</p>		

Step	Procedure	Points
2	<p>Remove the screw of the earth / ground wire.</p>  <p>(R18586)</p>	
3	<p>Disconnect all the connecting wires.</p>  <p>(R10212)</p>	
4	<p>Disconnect the connectors black (power supply), white (power supply), and red (signal).</p>  <p>(R0147)</p>	<ul style="list-style-type: none"> ■ Black-power supply White-power supply Red-signal

Step	Procedure	Points
5	<p data-bbox="212 219 451 344">Detach the clamp for the thermistor assembly from the electrical box.</p>  <p data-bbox="724 636 788 663">Clamp</p> <p data-bbox="1007 656 1077 678">(R14012)</p>	
6	<p data-bbox="212 698 451 757">Remove the 2 screws of the electrical box.</p>  <p data-bbox="1007 1120 1077 1142">(R14013)</p>	
7	<p data-bbox="212 1155 451 1214">Lift the electrical box and remove it.</p>  <p data-bbox="884 1227 1011 1254">Electrical box</p> <p data-bbox="1007 1576 1077 1599">(R14014)</p>	

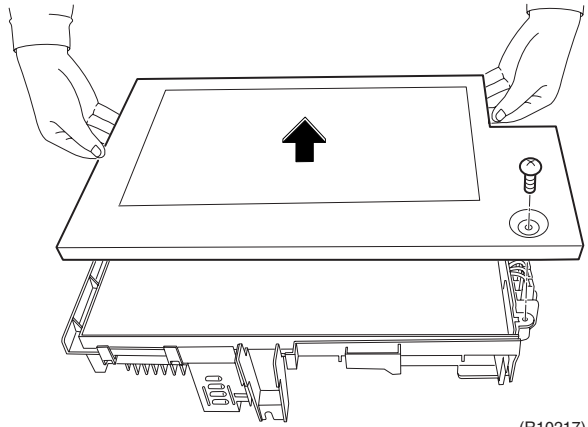
3. Removal of PCB

Procedure

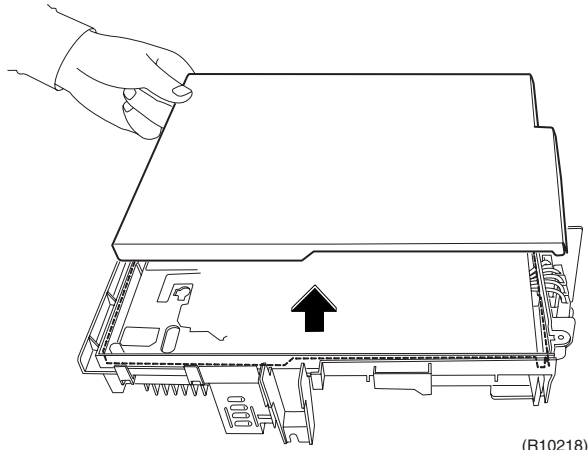


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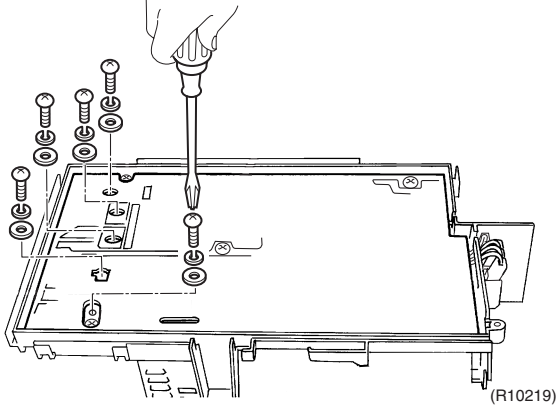
Step	Procedure	Points
1	Remove the screw of the electrical box (cover). Lift the electrical box (cover) and remove.	Preparation ■ Remove the electrical box according to "Removal of Electrical Box".
2	Lift the insulation sheet and remove.	
3	Remove the 5 screws for the PCB or the radiation fin.	



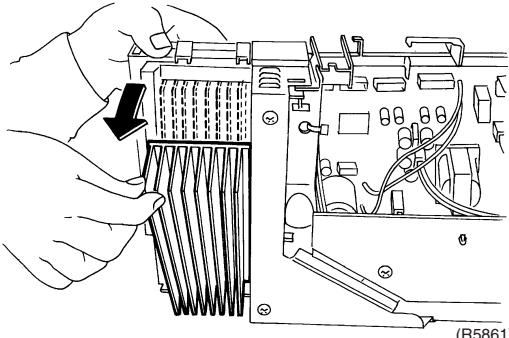
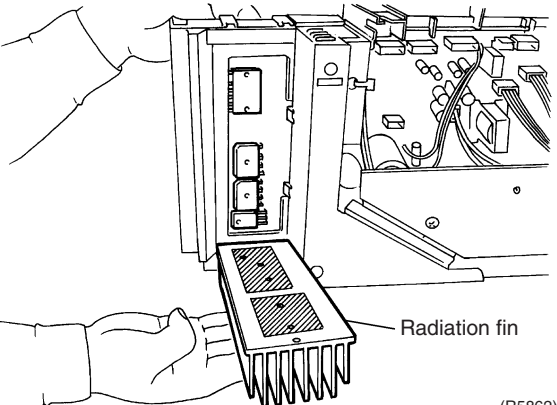
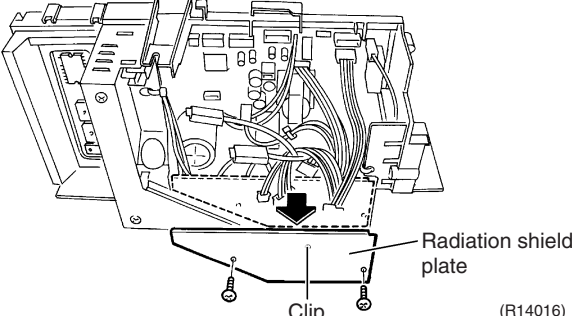
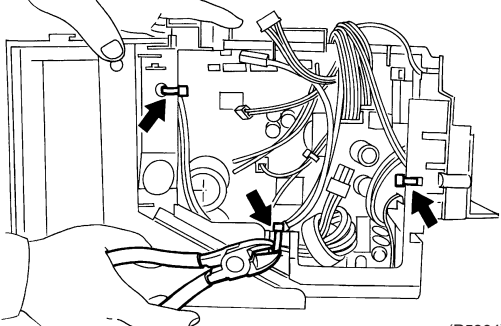
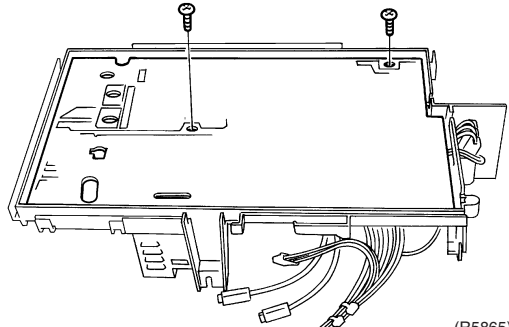
(R10217)

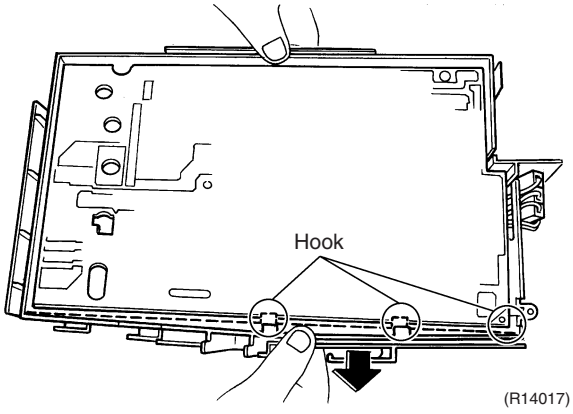
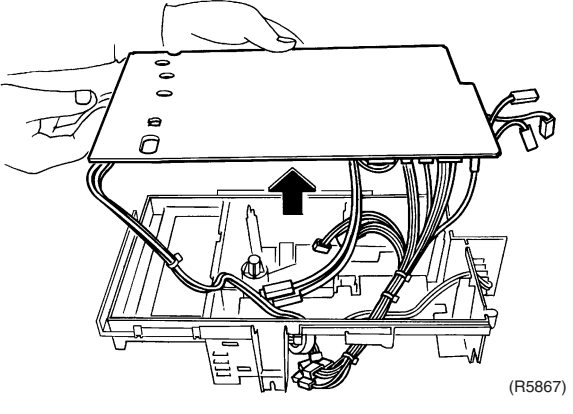
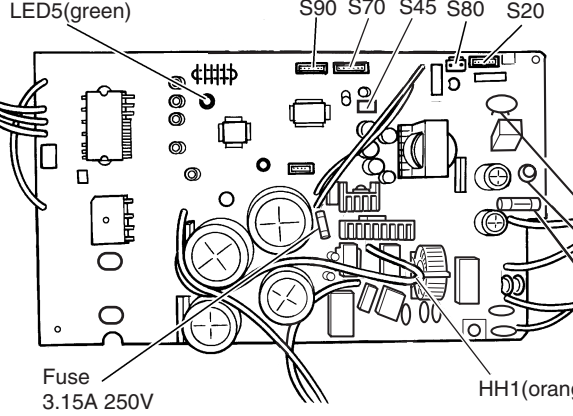


(R10218)



(R10219)

Step	Procedure	Procedure	Points
4	Detach the radiation fin.	 <p>(R5861)</p>  <p>Radiation fin</p> <p>(R5862)</p>	<ul style="list-style-type: none"> ■ In working, be careful not to break the PCB with the excessive force because the PCB and the radiation fin are adhered to one another. ■ When reassembling, make sure to use the silicon material.
5	Remove the 2 screws and detach the clip to remove the radiation shield plate.	 <p>Radiation shield plate</p> <p>Clip</p> <p>(R14016)</p>	
6	Cut the 3 clamps.	 <p>(R5864)</p>	
7	Remove the 2 screws.	 <p>(R5865)</p>	

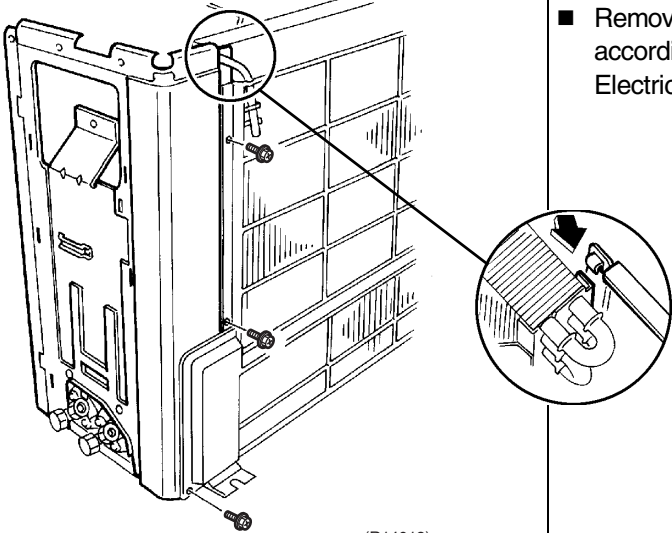
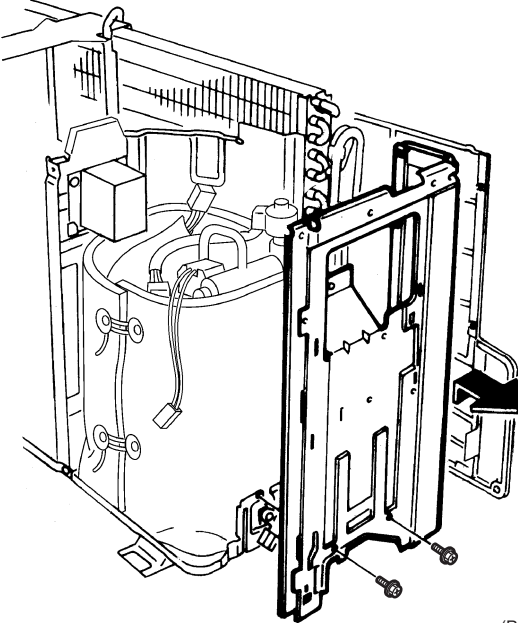
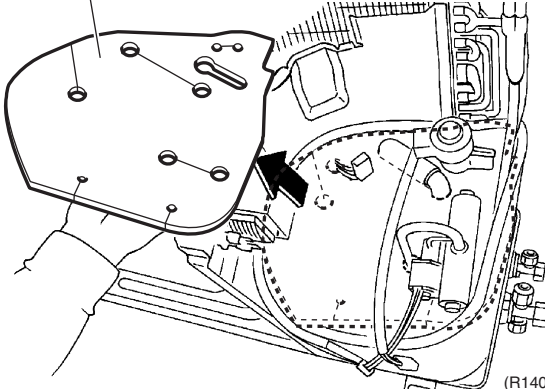
Step	Procedure	Points
8	<p>Unfasten the 3 hooks of the electrical box.</p> 	
9	<p>Remove the PCB from the electrical box.</p> 	
10	<p>Disconnect the connectors.</p> 	<p>(R10227)</p> <ul style="list-style-type: none"> S20 : Expansion valve S45 : Thermal fuse S70 : Fan motor S80 : Four way valve S90 : Thermistor (outdoor temperature / outdoor heat exchanger / discharge pipe)

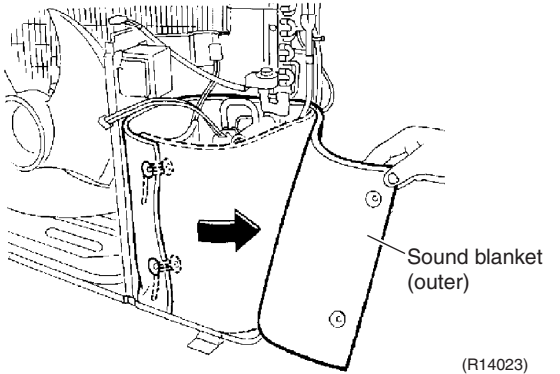
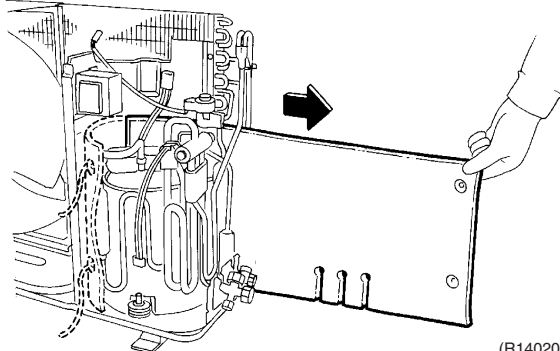
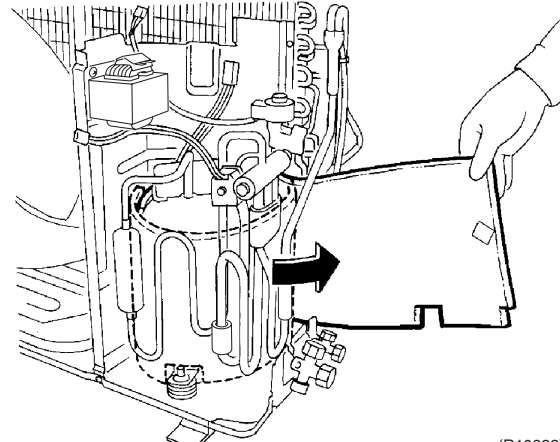
4. Removal of Sound Blankets

Procedure



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

Step	Procedure	Points
<p>1. Remove the right side panel.</p> <p>1 Remove the 3 screws on the back side of the right side panel.</p> <p>2 Remove the 2 screws.</p> <p>3 Lift the right side panel to unfasten the 2 hooks and remove it.</p>	 <p>(R14018)</p>  <p>(R14019)</p>	<p>Preparation</p> <ul style="list-style-type: none"> Remove the electrical box according to "Removal of Electrical Box".
<p>2. Remove the sound blankets.</p> <p>1 Remove the sound blanket (top).</p>	<p>Sound blanket (top)</p>  <p>(R14055)</p>	<ul style="list-style-type: none"> Since the piping ports on the sound blanket are torn easily, remove the blanket carefully.

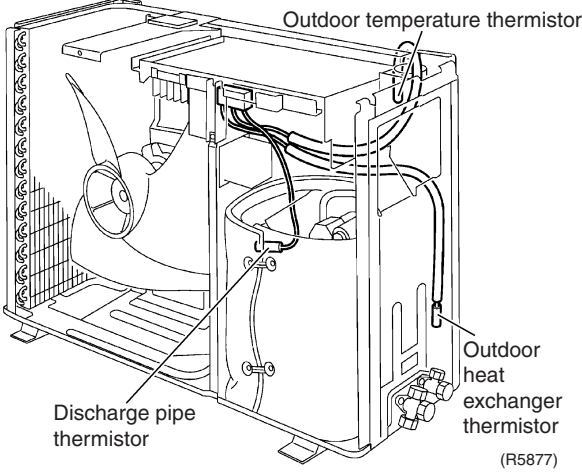
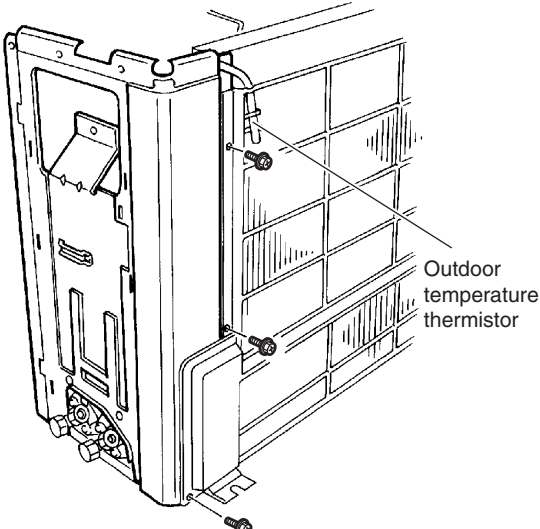
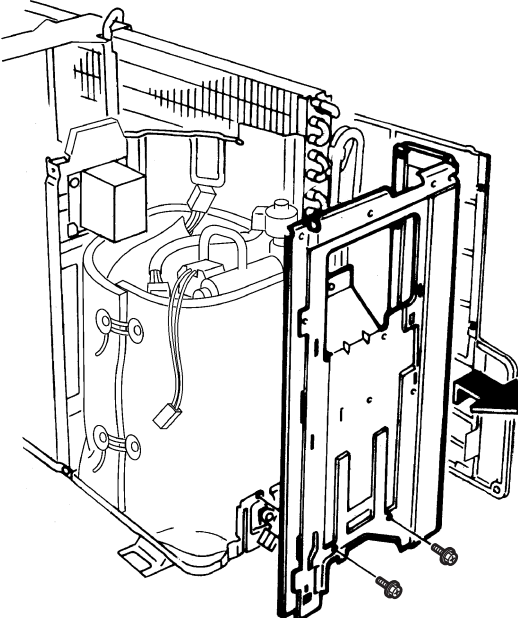
Step	Procedure	Points	
2	Untie the strings and open the sound blanket (outer).	 <p>(R14023)</p>	
3	Pull the sound blanket (outer) out.	 <p>(R14020)</p>	<ul style="list-style-type: none"> ■ Since the piping ports on the sound blanket are torn easily, remove the blanket carefully.
4	Open the sound blanket (inner) and pull it out.	 <p>(R10233)</p>	

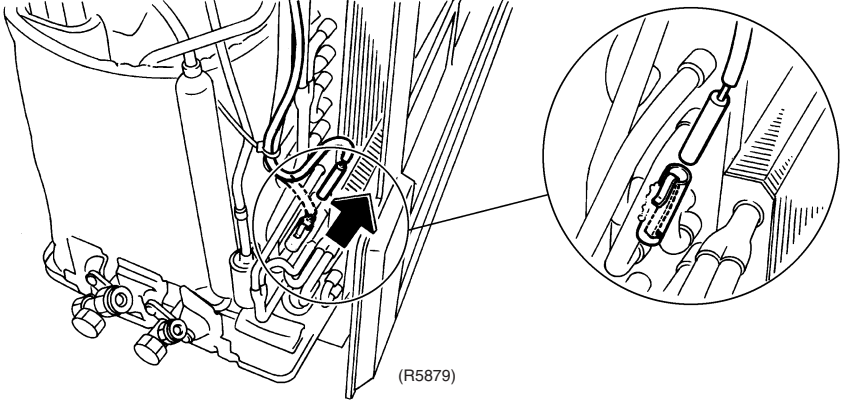
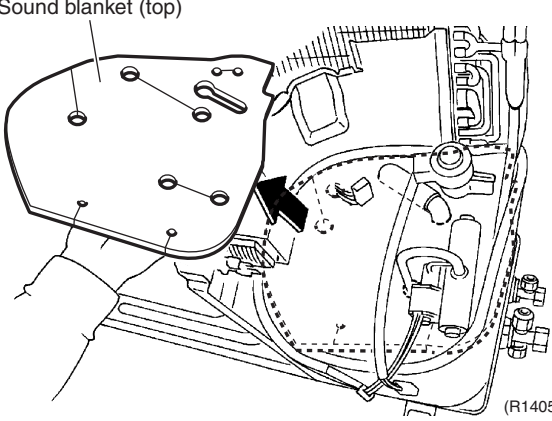
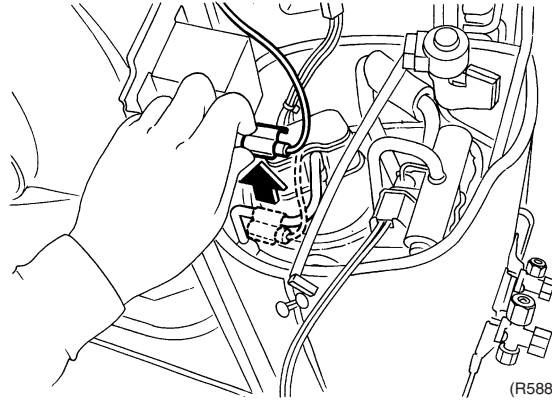
5. Removal of Thermistor Assembly

Procedure



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Step	Procedure	Points
1	<p>The figure shows the arrangement of the thermistor assembly.</p> 	<p>Preparation</p> <ul style="list-style-type: none"> Remove the electrical box according to "Removal of Electrical Box".
2	<p>Remove the 3 screws on the back side of the right side panel and detach the outdoor temperature thermistor.</p> 	
3	<p>Remove the 2 screws.</p>	
4	<p>Lift the right side panel to unfasten the 2 hooks and remove it.</p> 	

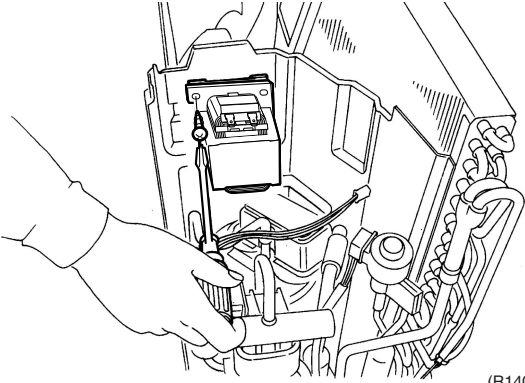
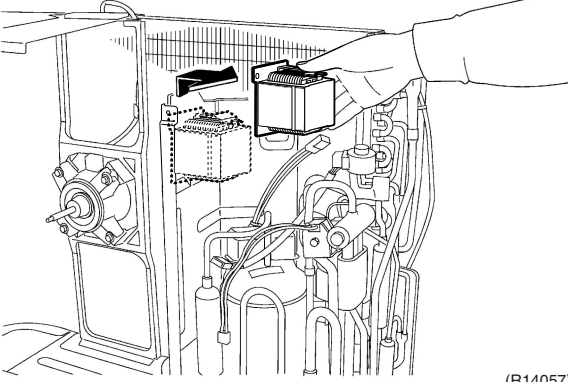
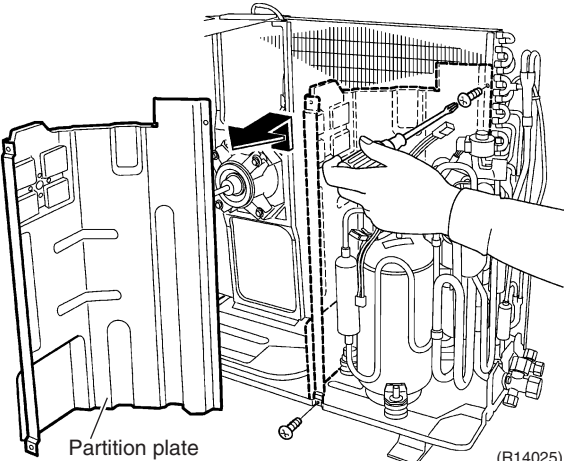
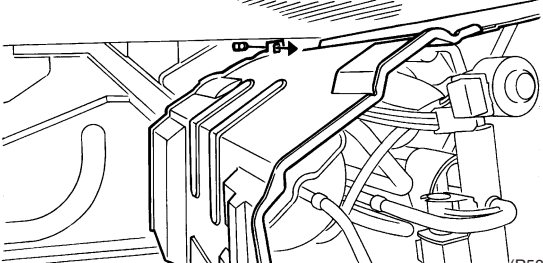
Step	Procedure	Points
5	<p>Pull out the outdoor heat exchanger thermistor.</p>  <p>(R5879)</p>	
6	<p>Remove the sound blanket (top).</p>  <p>Sound blanket (top)</p> <p>(R14055)</p>	<ul style="list-style-type: none"> ■ Be careful not to lose the clip for the thermistor. ■ Since the piping ports on the sound blanket are torn easily, remove the blanket carefully.
7	<p>Release the discharge pipe thermistor.</p>  <p>(R5880)</p>	<ul style="list-style-type: none"> ■ Detach the discharge pipe thermistor while opening the thermistor fixing clip. ■ Be careful not to lose the clip for the discharge pipe thermistor. ■ Meet the edge of the thermistor and the clip when reassembling.

6. Removal of Reactor / Partition Plate

Procedure



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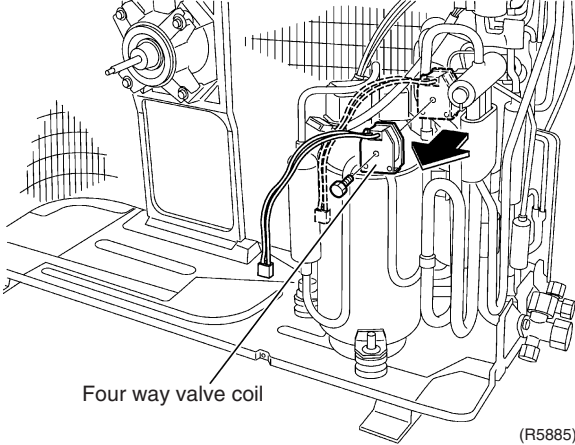
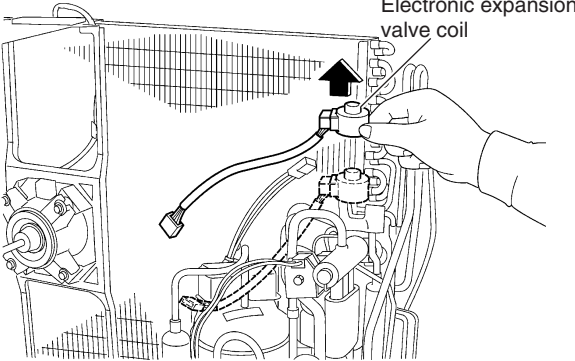
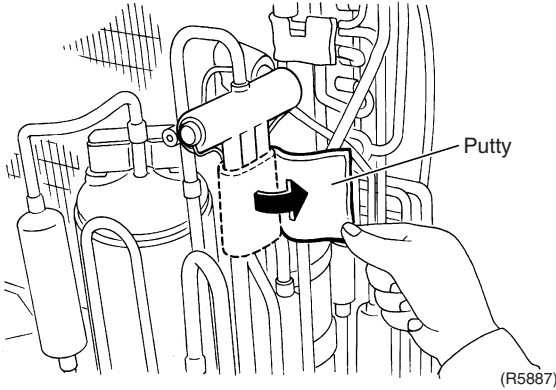
Step	Procedure	Points
1. Remove the reactor. 1 Remove the screw and remove the reactor.	 <p>(R14056)</p>  <p>(R14057)</p>	Preparation <ul style="list-style-type: none"> Remove the sound blankets according to "Removal of Sound Blankets".
2. Remove the partition plate. 1 Remove the 2 screws. 2 Lift the partition plate and remove it.	 <p>Partition plate</p> <p>(R14025)</p>  <p>(R5884)</p>	<ul style="list-style-type: none"> When reassembling, make sure to catch the lower hook of the partition plate.

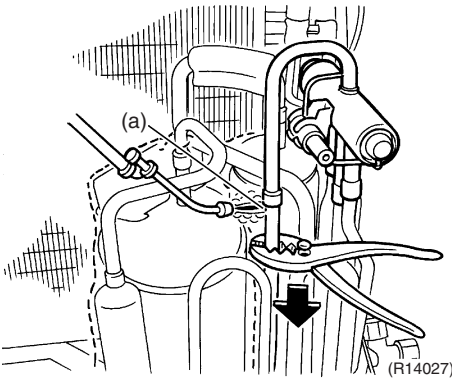
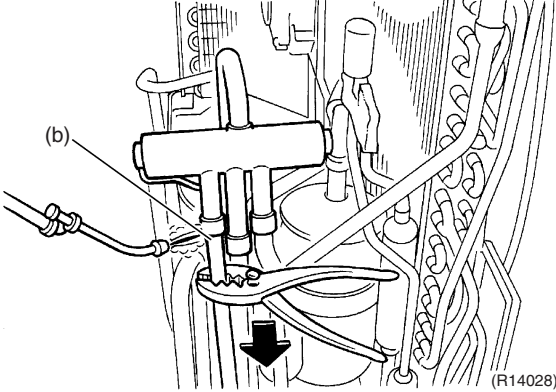
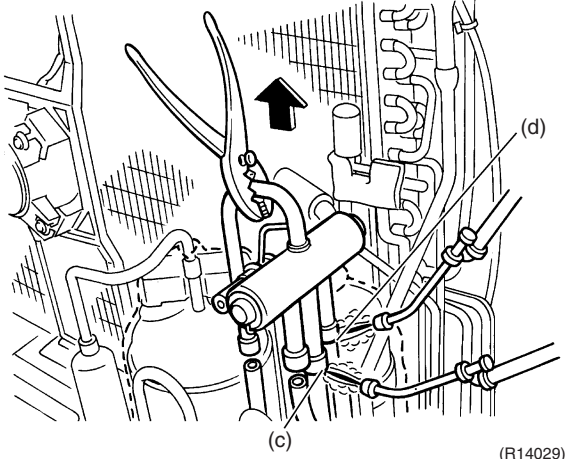
7. Removal of Four Way Valve

Procedure



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

Step	Procedure	Points
1	<p>Remove the screw and remove the four way valve coil.</p>  <p style="text-align: right;">(R5885)</p>	<p>Preparation</p> <ul style="list-style-type: none"> Remove the sound blankets according to "Removal of Sound Blankets".
2	<p>Pull out the electronic expansion valve coil.</p>  <p style="text-align: right;">(R14026)</p>	
3	<p>Remove the putty.</p>  <p style="text-align: right;">(R5887)</p>	

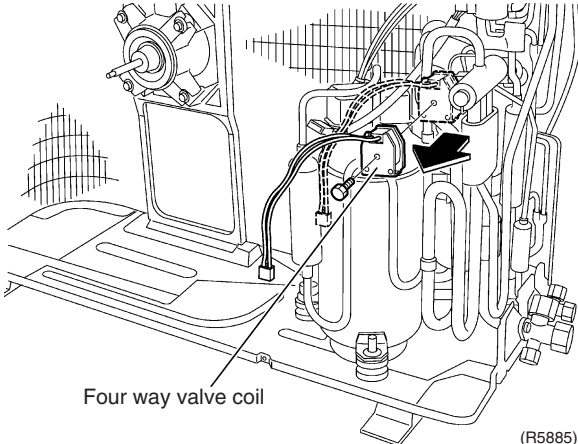
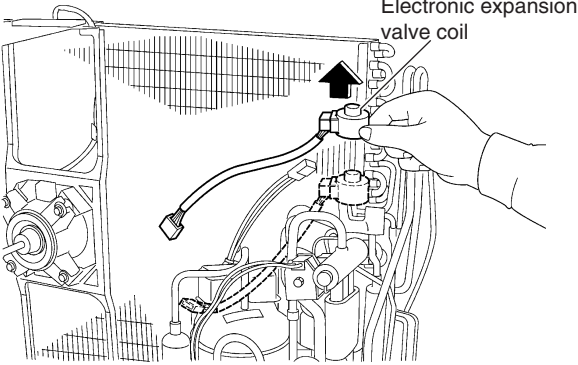
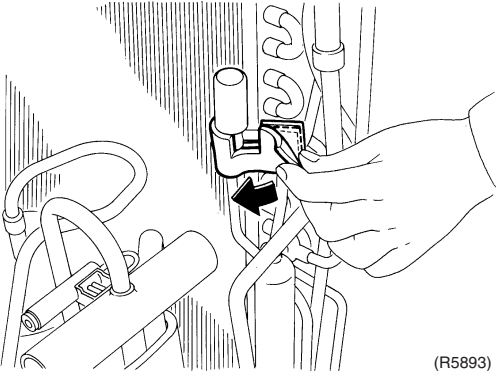
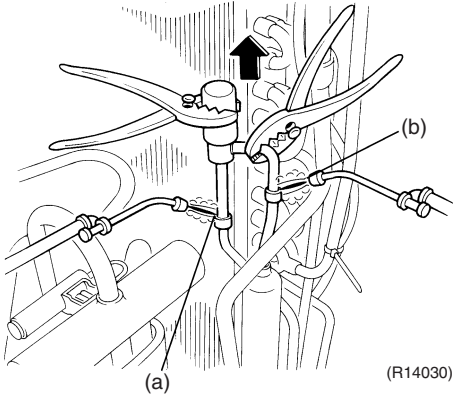
Step	Procedure	Points
<ul style="list-style-type: none"> ■ Before working, make sure that the refrigerant gas is empty in the circuit. ■ Be sure to apply nitrogen replacement when heating up the brazed part. 	 <p style="text-align: right;">(R14027)</p>	<p>Warning Be careful not to get yourself burnt with the pipes and other parts that are heated by the gas brazing machine.</p>
4	Heat up the 4 brazed parts of the four way valve. Disconnect them in the order of (a) (b) (c) (d).	<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>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. 	 <p style="text-align: right;">(R14028)</p>  <p style="text-align: right;">(R14029)</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. <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.

8. Removal of Electronic Expansion Valve

Procedure



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

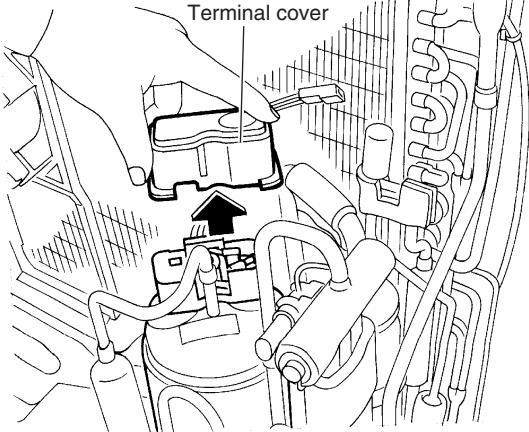
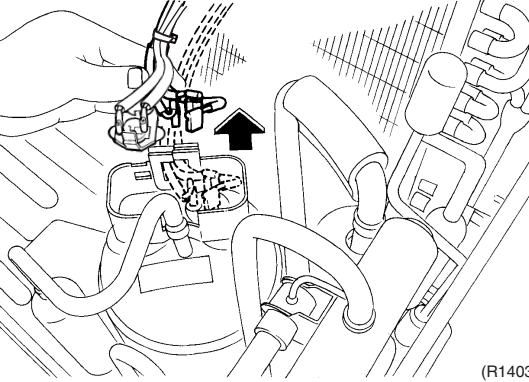
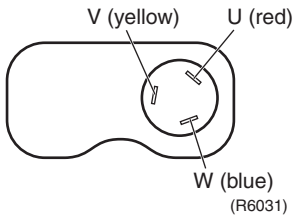
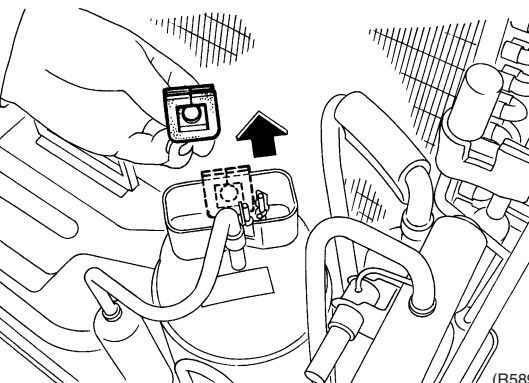
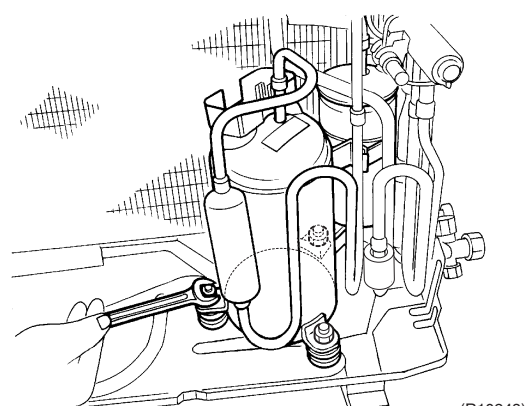
Step	Procedure	Points
1	Remove the screw and remove the four way valve coil.  <p style="text-align: center;">Four way valve coil</p> <p style="text-align: right;">(R5885)</p>	Preparation ■ Remove the sound blankets according to "Removal of Sound Blankets".
2	Pull out the electronic expansion valve coil.  <p style="text-align: right;">Electronic expansion valve coil</p> <p style="text-align: right;">(R14026)</p>	
3	Remove the putty.  <p style="text-align: right;">(R5893)</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>
■ 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 If the refrigerant gas leaks during work, ventilate the room. (If the refrigerant gas is exposed to flames, toxic gas may be generated.)</p>
4	Heat up the 2 brazed parts and disconnect them in the order of (a) (b).  <p style="text-align: center;">(a) (b)</p> <p style="text-align: right;">(R14030)</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>

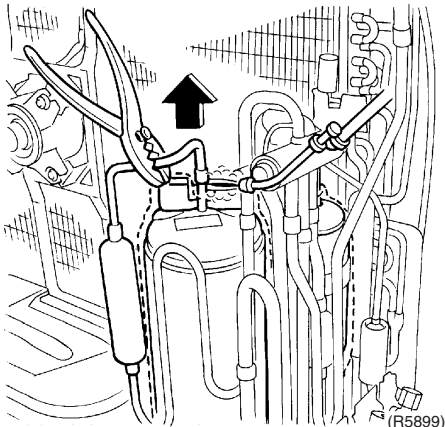
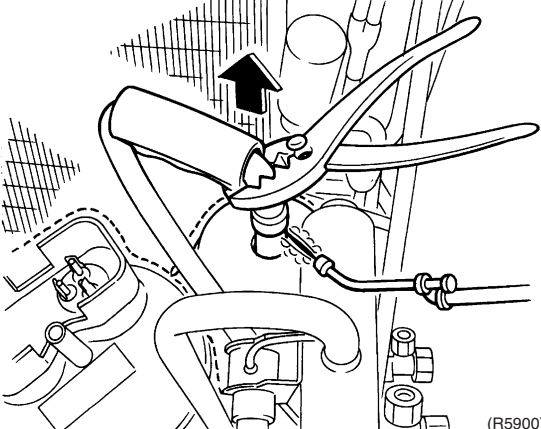
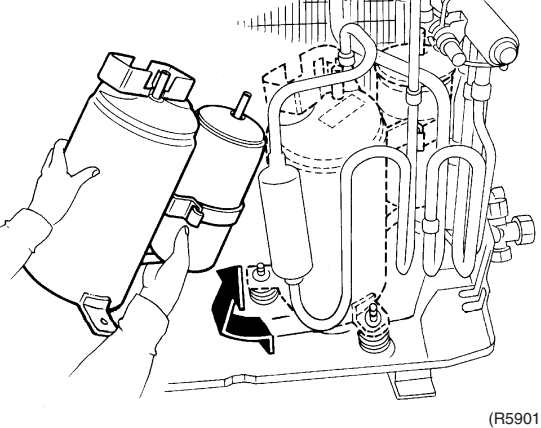
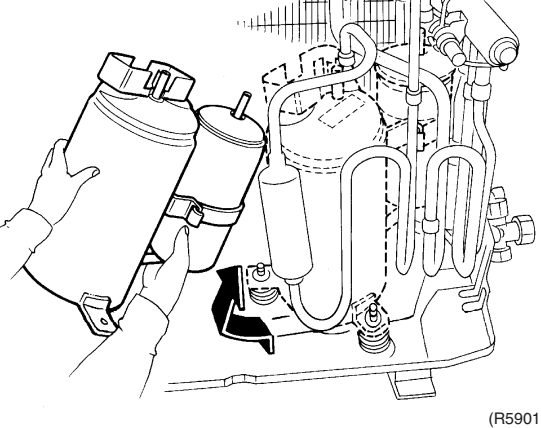
9. Removal of Compressor

Procedure



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

Step	Procedure	Points
1	Remove the terminal cover.  <p style="text-align: right;">(R14031)</p>	Preparation <ul style="list-style-type: none"> Remove the sound blankets according to "Removal of Sound Blankets".
2	Disconnect the compressor lead wires and detach the overload protector.  <p style="text-align: right;">(R14032)</p>	<ul style="list-style-type: none"> Be careful so as not to burn the compressor terminals or the name plate.  <p style="text-align: right;">(R6031)</p>
3	Remove the protecting bushing.  <p style="text-align: right;">(R5897)</p>	
4	Remove the 3 fixing nuts for compressor.  <p style="text-align: right;">(R10248)</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>
<p>5 Heat up the brazed part of the discharge side and disconnect.</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>6 Heat up the brazed part of the suction side and disconnect.</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> <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>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. 		<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.

Revision History

Month / Year	Version	Revised contents
02 / 2013	Si00-979	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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