




# REMOVAL PROCEDURE



SERVICE  
MANUAL

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

## 4.0/5.0 kW Class

-  Outdoor Unit
-  Inverter
-  Multi Type



# **Service Manual Removal Procedure**

## **Outdoor Unit**

●Heat Pump  
2MXU40GV1B  
2MXU50GV1B

# Table of Contents

1. Removal of Humidifier Unit .....	2
2. Removal of Heater ASSY / Humidifying Rotor (Moisture Adsorption Element) / Humidifying Rotor Motor .....	5
3. Removal of Damper Motor .....	9
4. Removal of Limit Switch / Humidifying Thermistor .....	11
5. Removal of Fan-valve-duct ASSY .....	14
6. Removal of Hygroscopic Fan Rotor / Hygroscopic Fan Motor .....	16
7. Removal of Panels and Plates .....	17
8. Removal of Electrical Box .....	20
9. Removal of PCB .....	25
10. Removal of Sound Blankets .....	31
11. Removal of Propeller Fan / Fan Motor .....	34
12. Removal of Thermistors .....	37
13. Removal of Compressor .....	39
14. Removal of Four Way Valve / Electronic Expansion Valve .....	41



**Note:**

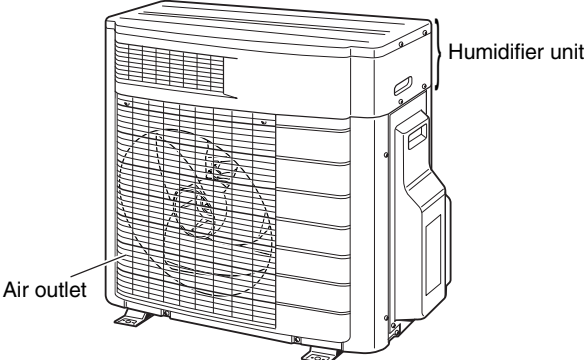
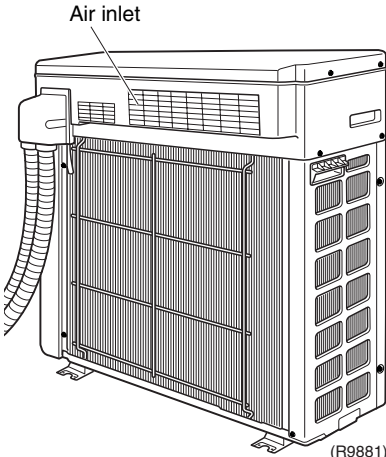
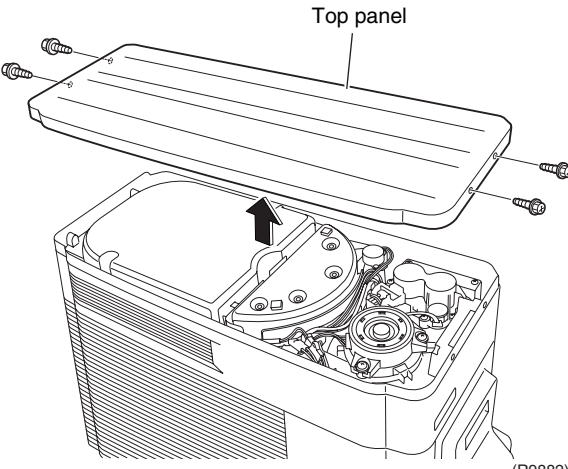
♦ The illustrations may be slightly different depending on the model.

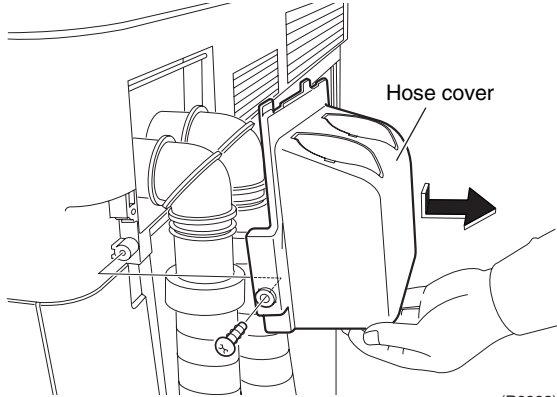
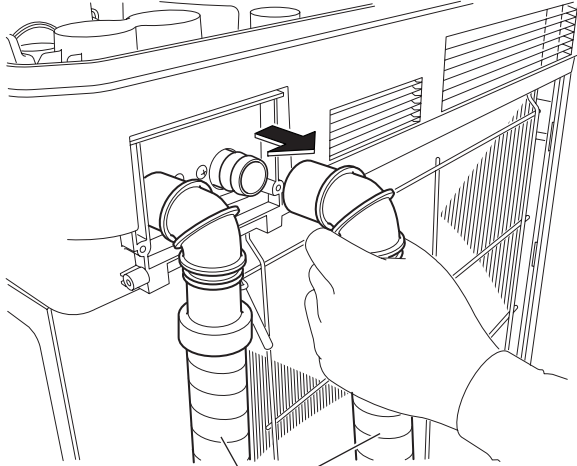
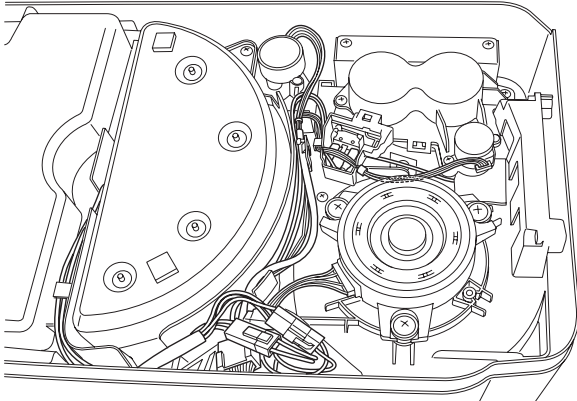
# 1. Removal of Humidifier Unit

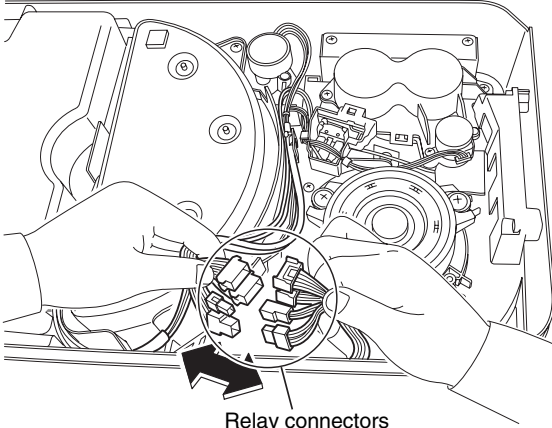
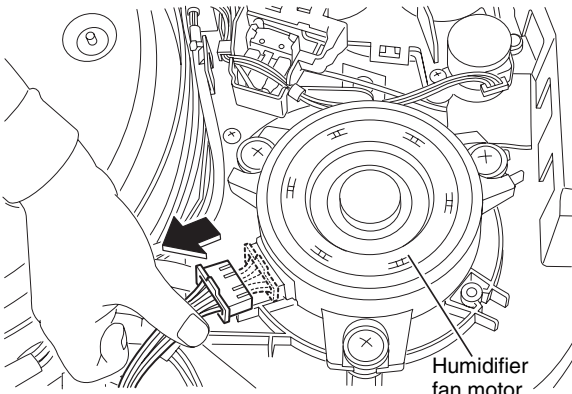
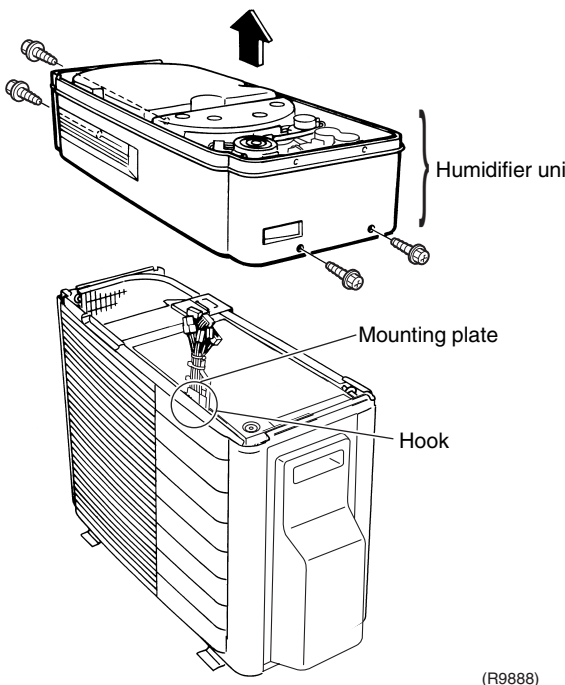
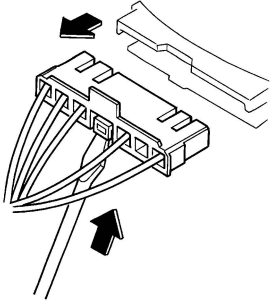
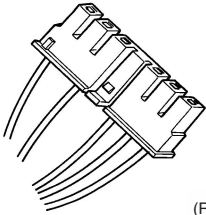
**Procedure**



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

Step	Procedure	Points
<p>1. External appearance</p>	 <p>(R9880)</p>  <p>(R9881)</p>	
<p>2. Removal of the humidifier unit</p> <p>1 Remove the 4 screws and lift up the top panel to remove.</p>	 <p>(R9882)</p>	

Step	Procedure	Points
2	<p>Remove the screw, and the hose cover.</p>  <p style="text-align: right;">(R9883)</p>	
3	<p>Take out the humidifying hoses.</p>  <p style="text-align: center;">Humidifying hose</p> <p style="text-align: right;">(R9884)</p>	
4	<p>The figure shows the arrangement of the relay harness.</p>  <p style="text-align: right;">(R9885)</p>	<ul style="list-style-type: none"> <li>■ Be sure to wait 10 minutes or more after turning off the power supply before disconnecting the connectors.</li> </ul>

Step	Procedure	Points
5	<p>Disconnect the 4 relay connectors.</p>  <p>Relay connectors (R9886)</p>	<ul style="list-style-type: none"> <li>Do not pull the harnesses from the outdoor unit strongly so as not to loose the hook of the mounting plate. (See the illustration below on this page for the mounting plate.)</li> </ul>
6	<p>Disconnect the connector for humidifier fan motor.</p>  <p>Humidifier fan motor (R9887)</p>	<ul style="list-style-type: none"> <li>Be sure to wait 10 minutes or more after turning off the power supply before disconnecting the connectors.</li> <li>Pull out the connector while pushing up the hook on the bottom side.</li> </ul>
7	<p>Remove the 4 screws of the humidifier unit and lift it up to remove.</p>  <p>Humidifier unit (R9888)</p> <p>Mounting plate</p> <p>Hook</p>	 <p>&lt;From the back side&gt;</p>  <p>(R5796)</p> <ul style="list-style-type: none"> <li>When lifting up the humidifier unit, be careful not to pull the relay harnesses forcibly.</li> <li>When reassembling the humidifier unit, make sure the mounting plate is hooked (refer to page 21) and do not forget to connect the relay connectors.</li> </ul>

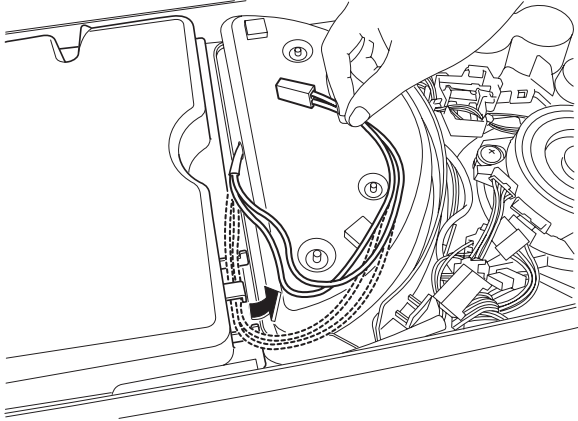
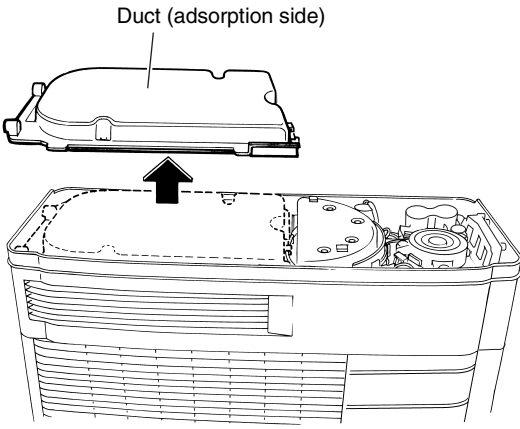
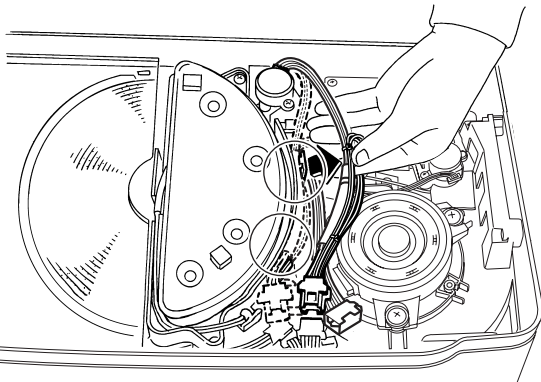
## 2. Removal of Heater ASSY / Humidifying Rotor (Moisture Adsorption Element) / Humidifying Rotor Motor

### Procedure

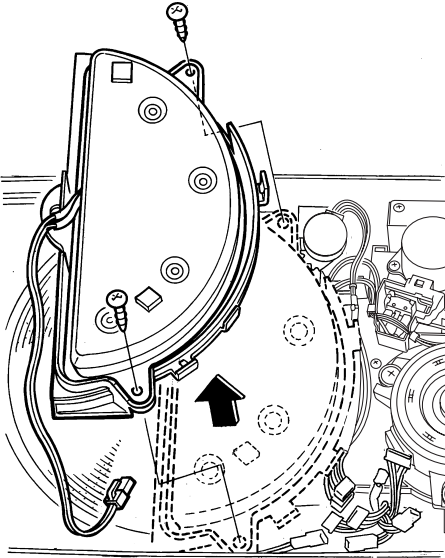
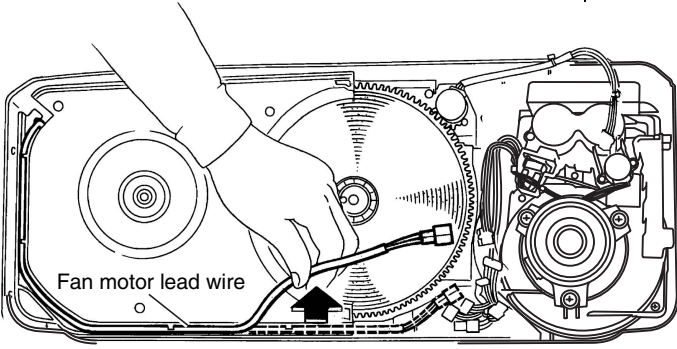
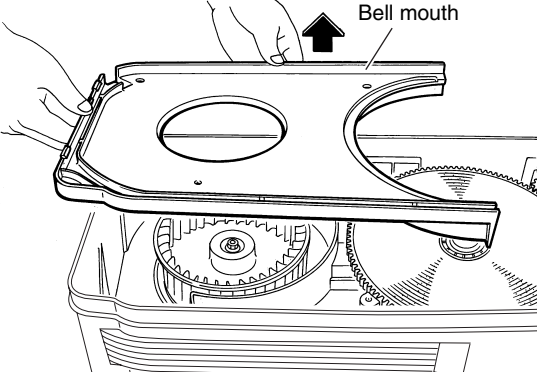


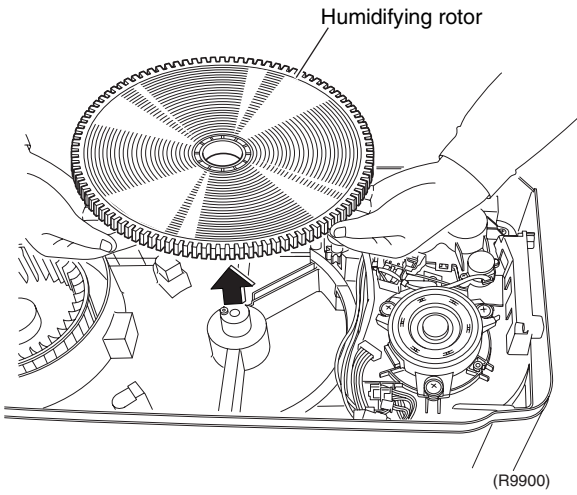
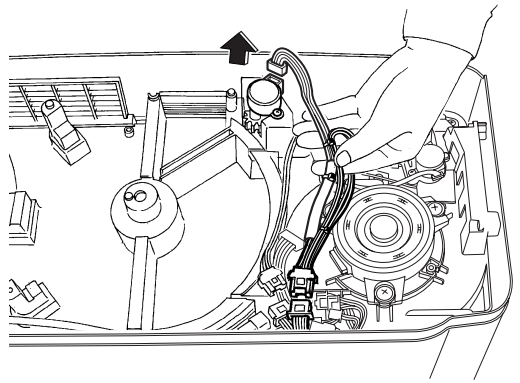
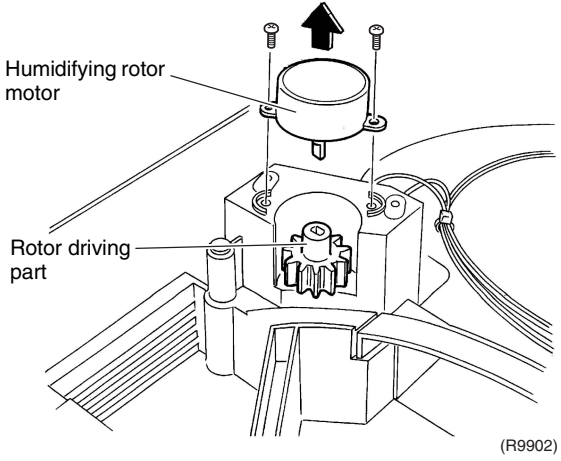
**Warning** Be sure to wait 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
Internal structure of the humidifier unit		<p><b>Preparation</b></p> <ul style="list-style-type: none"> <li>■ Remove the top panel according to "Removal of Humidifier Unit".</li> <li>■ The humidifying rotor is located under the heater ASSY and the duct.</li> </ul>
1. Removal of the heater ASSY	<p>1 Remove the 4 screws of the duct on adsorption side.</p>	

Step	Procedure	Points
2	<p>Detach the harness for heater from the groove.</p>  <p>(R9891)</p>	
3	<p>Remove the duct.</p>  <p>Duct (adsorption side)</p> <p>(R9892)</p>	
4	<p>Release the lead wire for humidifying rotor motor from 2 hooks.</p>  <p>(R9893)</p>	



Step	Procedure	Points
5	Remove the 2 screws to remove the heater ASSY.	<ul style="list-style-type: none"> <li>■ Do not dismount the heater ASSY.</li> </ul>
 <p style="text-align: right;">(R9894)</p>		
2. Removal of the humidifying rotor.		
1	Detach the lead wire for fan motor from the groove.	
 <p style="text-align: right;">(R9898)</p>		
2	Remove the bell mouth on adsorption side.	
 <p style="text-align: right;">(R9899)</p>		

Step	Procedure	Points
3	<p>Lift the humidifying rotor up to remove.</p>  <p style="text-align: right;">(R9900)</p>	<ul style="list-style-type: none"> <li>■ A heat catalyst (black) is applied on the upper side.</li> </ul>
<p>3. Removal of the humidifying rotor motor</p>		
1	<p>Disconnect the connector for the humidifying rotor motor.</p>  <p style="text-align: right;">(R9901)</p>	
2	<p>Remove the 2 screws of the humidifying rotor motor.</p>  <p style="text-align: right;">(R9902)</p>	

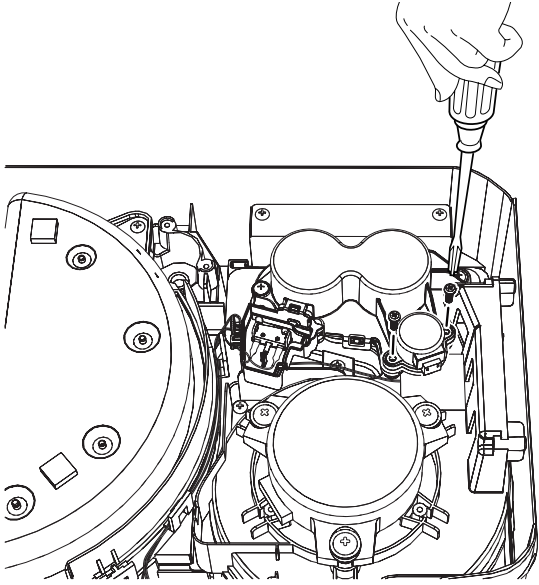
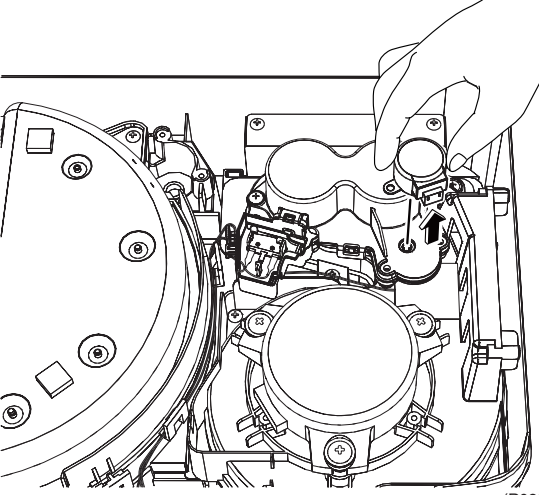
### 3. Removal of Damper Motor

#### Procedure



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

Step	Procedure	Points
1. Removal of the damper motor	<p style="text-align: right;">(R10348)</p>	<ul style="list-style-type: none"> <li>■ Disconnect the connector for the humidifying rotor motor. (Refer to page 8.)</li> </ul>
1	Disconnect the connector for the damper motor.	<p style="text-align: right;">(R0232)</p>

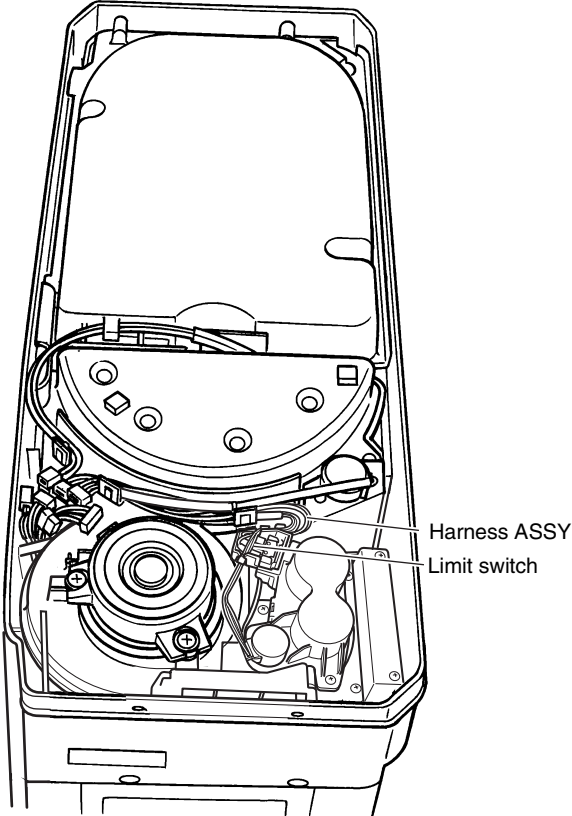
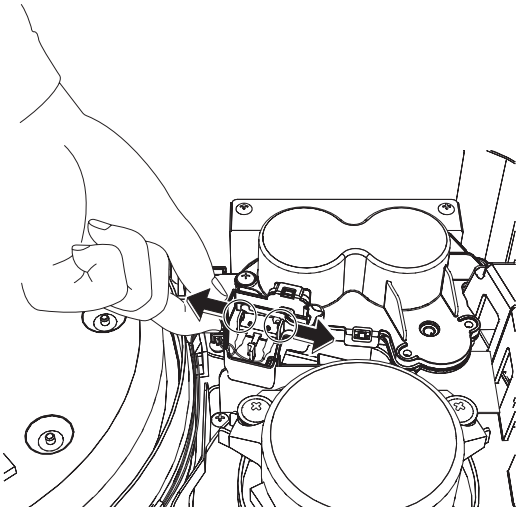
Step	Procedure	Points
2	Remove the 2 screws.  <p style="text-align: right;">(R0233)</p>	
3	Remove the damper motor.  <p style="text-align: right;">(R0234)</p>	

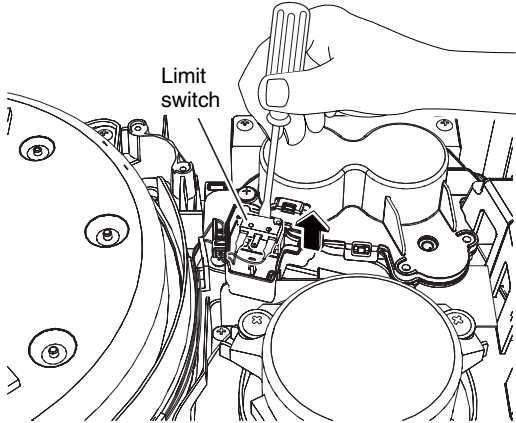
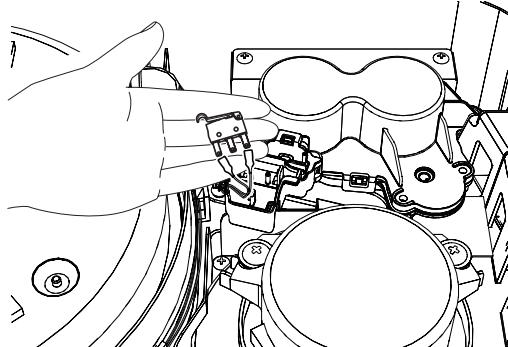
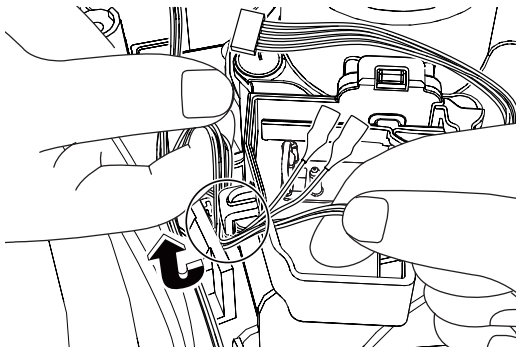
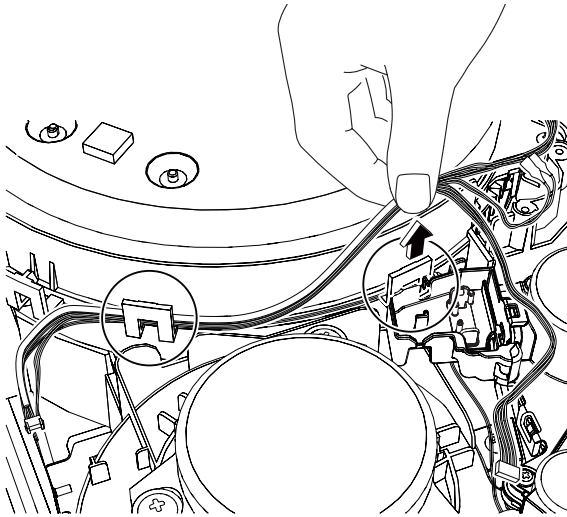
# 4. Removal of Limit Switch / Humidifying Thermistor

**Procedure**



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

Step	Procedure	Points
1. Removal of the limit switch		
1	Open the hooks.	(R10812)
		(R0235)

Step	Procedure	Procedure	Points
2	Push up the limit switch with a flat screwdriver.	 <p style="text-align: right;">(R0236)</p>	
3	Disconnect the terminals.	 <p style="text-align: right;">(R0237)</p>	
4	Release the harness from the hooks and remove the harness ASSY.	 <p style="text-align: right;">(R0238)</p>  <p style="text-align: right;">(R0239)</p>	

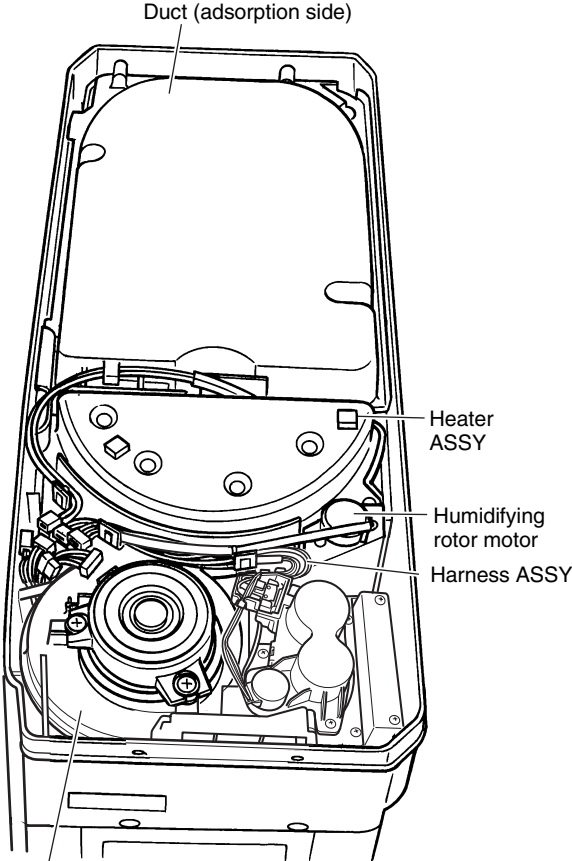
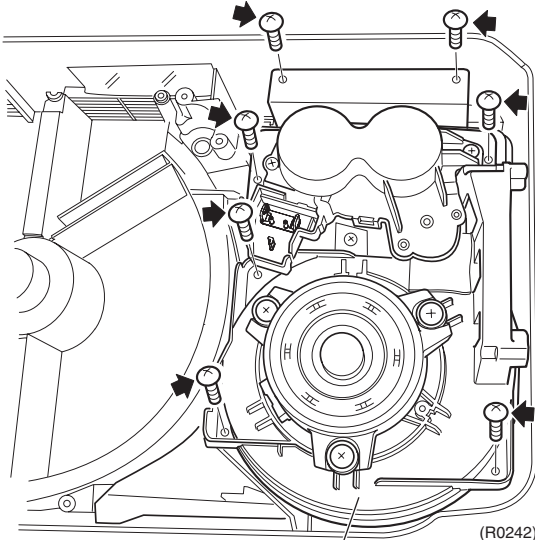
Step	Procedure	Points
2. Removal of the humidifying thermistor	<div data-bbox="518 271 1050 689"> <p>(R0245)</p> </div> <div data-bbox="497 752 1078 1301"> <p>(R10548)</p> </div> <div data-bbox="497 1384 1078 1794"> <p>Limit switch cover (R10547)</p> </div>	<ul style="list-style-type: none"> <li data-bbox="1102 217 1398 342">■ When replacing the humidifying thermistor, order a seal material together.</li>   <li data-bbox="1102 1305 1457 1397">■ When reassembling, put the harness through under the limit switch cover.</li> </ul>

# 5. Removal of Fan-valve-duct ASSY

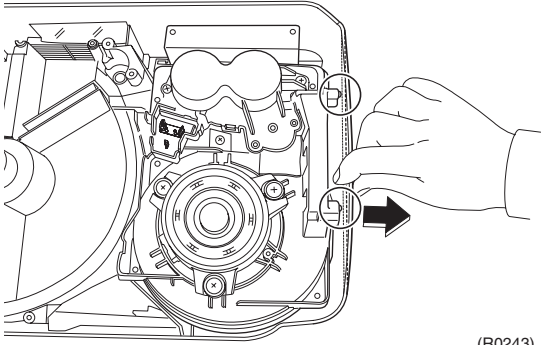
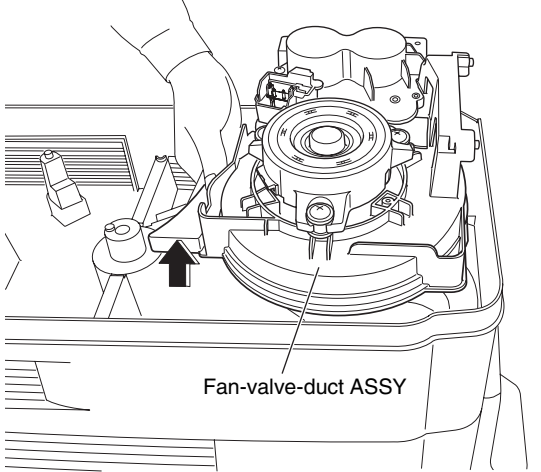
**Procedure**



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

Step	Procedure	Points
<p>1 Remove the 7 screws of the fan-valve-duct ASSY.</p>	 <p style="text-align: right;">(R10349)</p>  <p style="text-align: center;">Fan-valve-duct ASSY</p> <p style="text-align: right;">(R0242)</p>	<p><b>Preparation</b></p> <ul style="list-style-type: none"> <li>■ Remove the heater ASSY and the humidifying rotor.</li> <li>■ The humidifying rotor is located under the heater ASSY and the duct.</li> </ul> <ul style="list-style-type: none"> <li>■ Do not dismantle the fan-valve-duct ASSY. Replace it as a unit.</li> </ul>



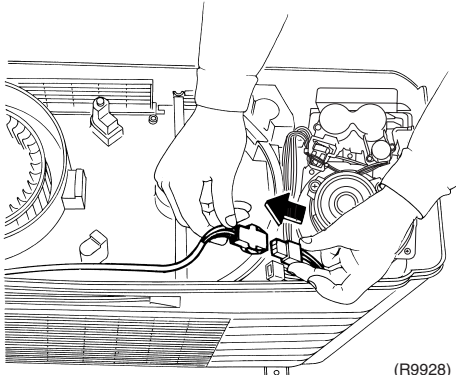
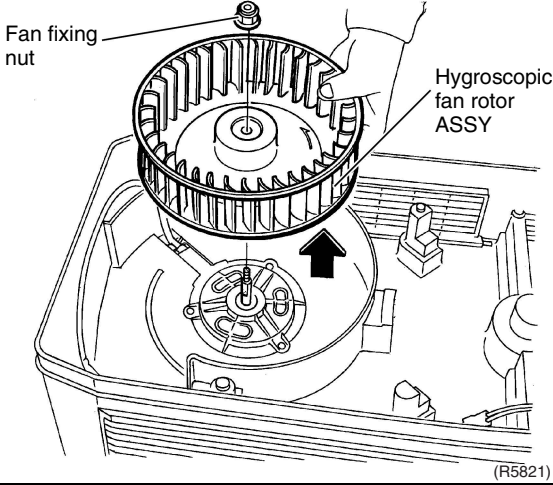
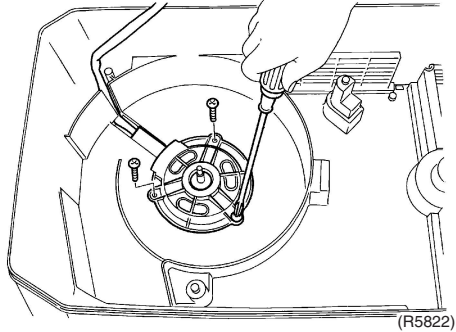
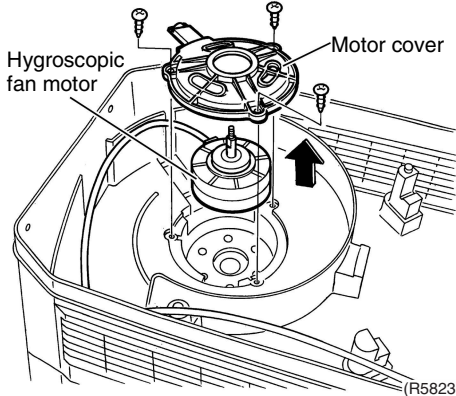
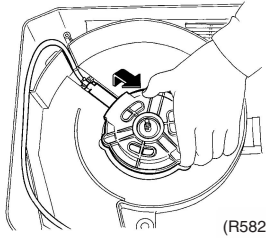
Step	Procedure	Points
2	Release the 2 hooks on the right side.  <p>(R0243)</p>	■ Release the hooks while bending the right side panel.
3	Lift up the fan-valve-duct ASSY to remove.  <p>Fan-valve-duct ASSY</p> <p>(R0244)</p>	

# 6. Removal of Hygroscopic Fan Rotor / Hygroscopic Fan Motor

**Procedure**



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

Step	Procedure	Points
<p>1. Removal of the hygroscopic fan rotor ASSY</p>	 <p>(R9928)</p>  <p>Fan fixing nut</p> <p>Hygroscopic fan rotor ASSY</p> <p>(R5821)</p>	<p><b>Preparation</b></p> <ul style="list-style-type: none"> <li>■ Remove the humidifying rotor according to "Removal of Humidifying Rotor".</li> <li>■ When reassembling, align the ▼ mark of the outdoor fan with the D-cut section of the motor shaft.</li> <li>■ Wrench size: 10mm</li> </ul>
<p>2. Removal of the hygroscopic fan motor</p>	 <p>(R5822)</p>  <p>Hygroscopic fan motor</p> <p>Motor cover</p> <p>(R5823)</p>	<ul style="list-style-type: none"> <li>■ Lift the motor cover first and pull out.</li> </ul>  <p>(R5824)</p>

## 7. Removal of Panels and Plates

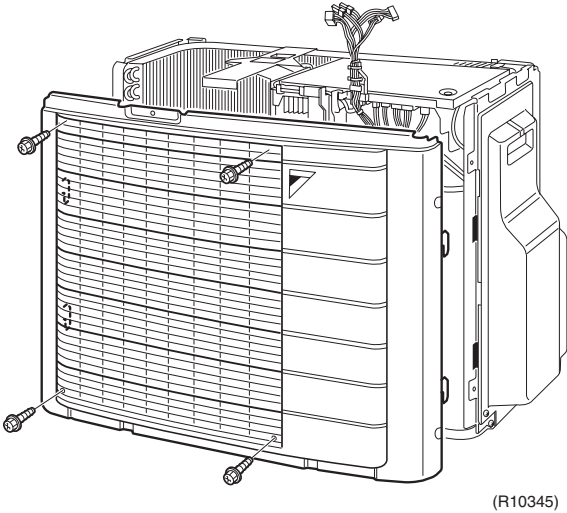
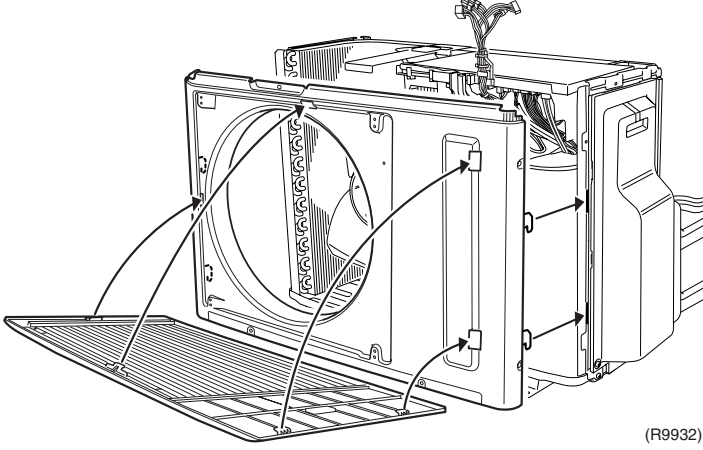
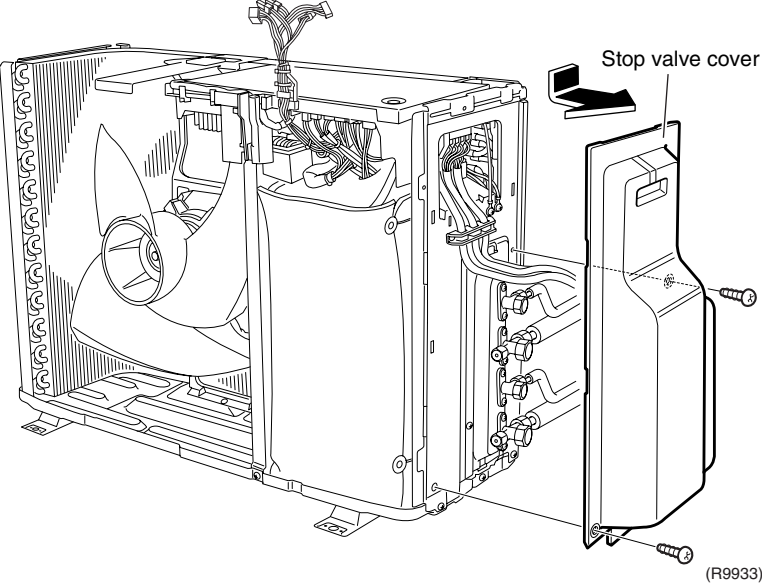
### Procedure

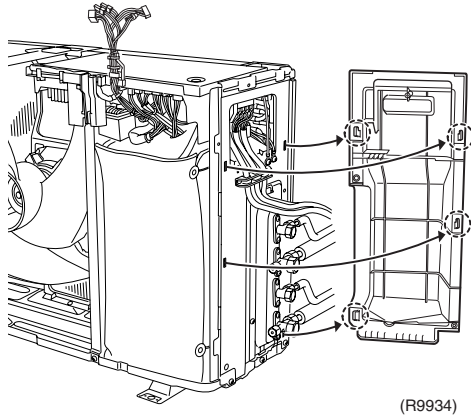


### Warning

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

Step	Procedure	Procedure	Points
1	External appearance.	<p>(R9929)</p> <p>(R9930)</p>	<ul style="list-style-type: none"> <li>■ Remove the humidifying unit.</li> <li>■ Do not release the mounting plate at this point.</li> </ul>
2	Remove the 8 screws to remove the front panel.	<p>(R9931)</p>	<ul style="list-style-type: none"> <li>■ The front panel has 4 hooks.</li> <li>■ The bell mouth can not be removed.</li> </ul>

Step	Procedure	Points
3	Remove the 4 screws of the discharge grille.	
	 <p>(R10345)</p>	
4	Release the 4 hooks and remove the discharge grille.	<p>■ When reassembling, make sure to fit the 4 hooks.</p>
	 <p>(R9932)</p>	
5	Remove the 2 screws of the stop valve cover and remove it.	
	 <p>Stop valve cover</p> <p>(R9933)</p>	

Step	Procedure	Points
	 <p>(R9934)</p>	<ul style="list-style-type: none"><li>■ When reassembling the stop valve cover, make sure to fit the 4 hooks.</li></ul>

# 8. Removal of Electrical Box

**Procedure**

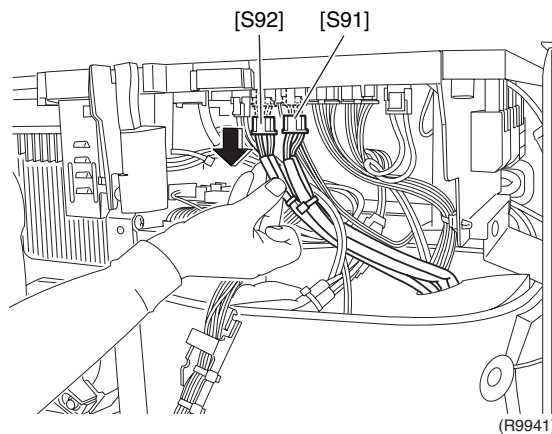
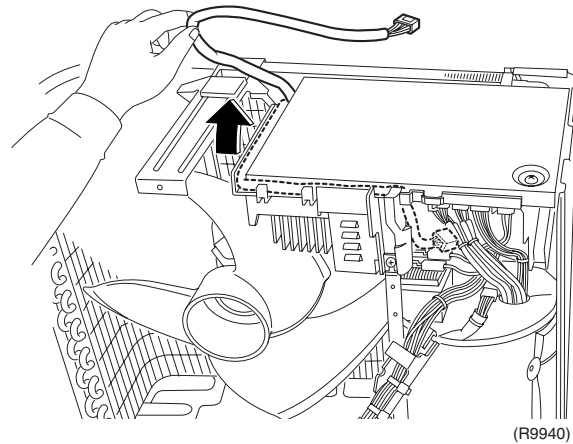
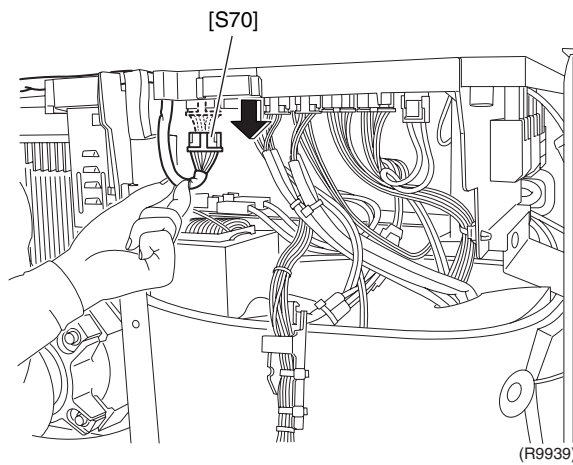
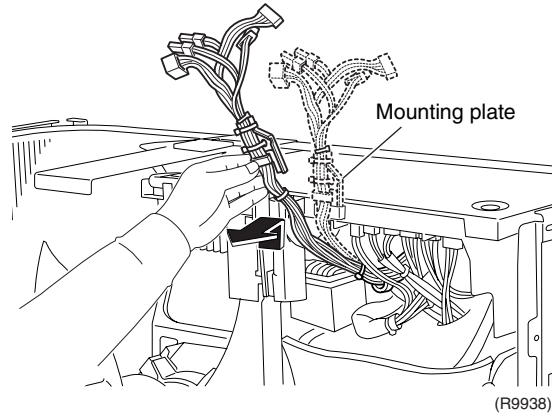


**Warning**

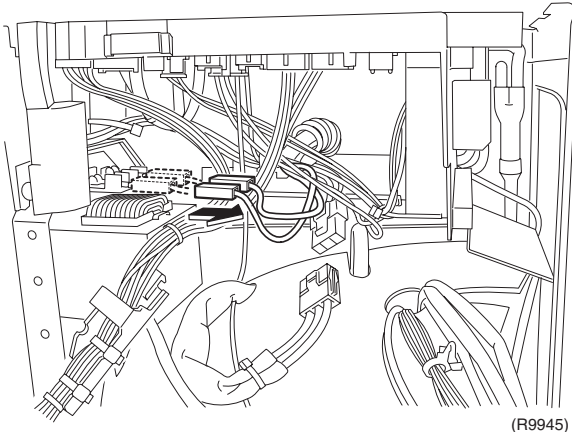
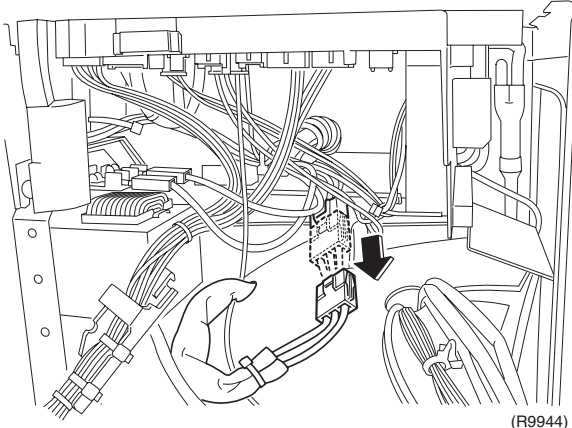
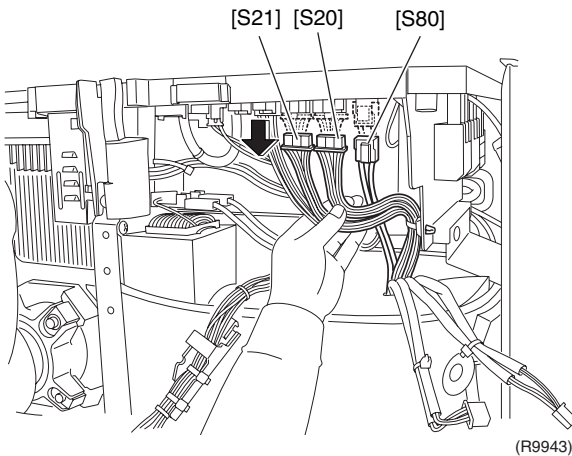
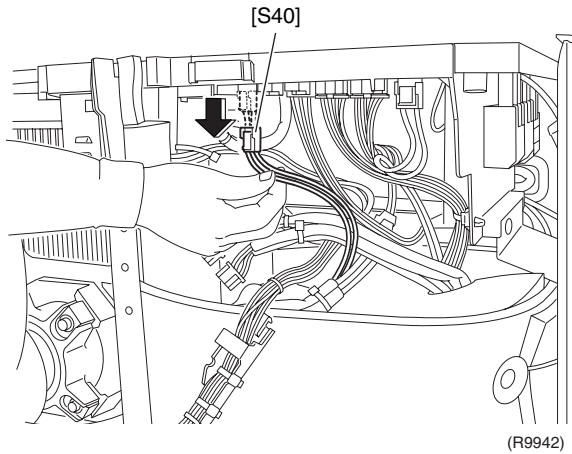
Be sure to wait 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
<p>1. Disconnect the connecting wires</p> <p>1 Remove the 2 earth screws. Remove the 2 screws to remove the wiring fixture. Then, remove the all screws for the connectors to disconnect the power supply cable and the connecting wires.</p>	<p style="text-align: right;">(R18644)</p>	<ul style="list-style-type: none"> <li>■ When reassembling, fasten the wires with screws on the terminal board.</li> <li>■ The terminal board is united resin formation.</li> </ul>
<p>2. Removal of the electrical box</p> <p>1 Release the outdoor air thermistor from the holder.</p> <p>2 Lift up the guard net to remove.</p>	<p style="text-align: right;">(R9936)</p> <p style="text-align: right;">(R9937)</p>	

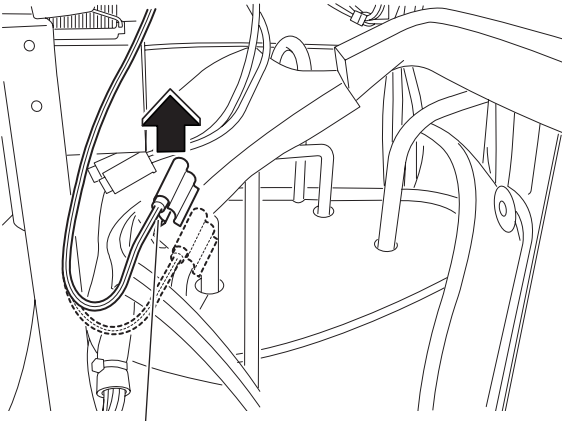
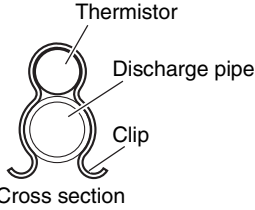
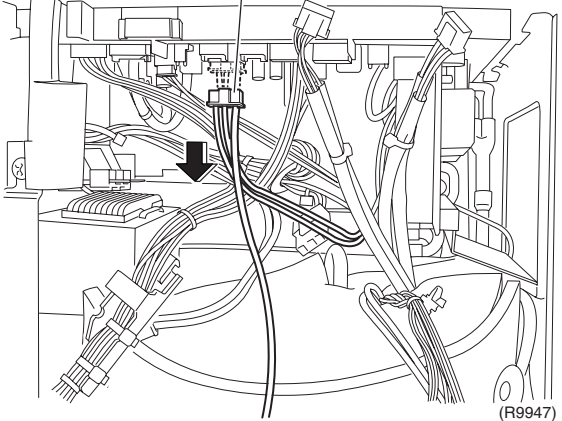
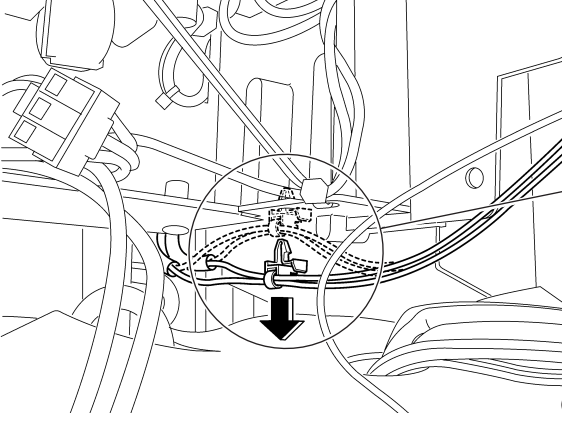
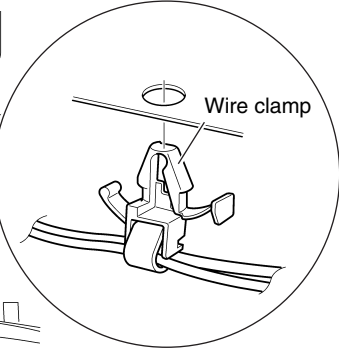
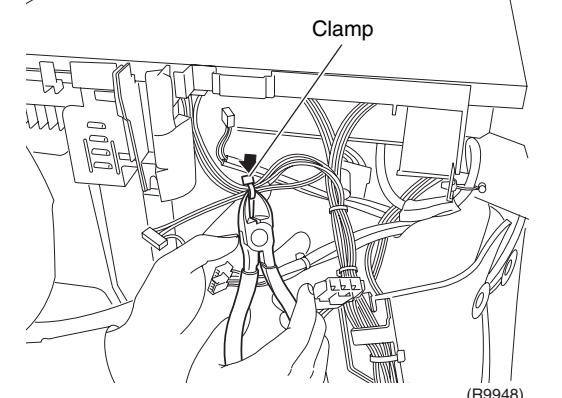
Step	Procedure	Points
3	Release the mounting plate from the hook.	<ul style="list-style-type: none"> <li>■ When reassembling, make sure to hook the mounting plate.</li> </ul>
4	Disconnect the connector for the fan motor [S70].	
5	Release the lead wire for the fan motor from the hooks.	
6	Disconnect the connector for the gas pipe thermistor [S91] and for the liquid pipe thermistor [S92].	<p>[S91] : Gas pipe thermistor (white)</p> <p>[S92] : Liquid pipe thermistor (red)</p>



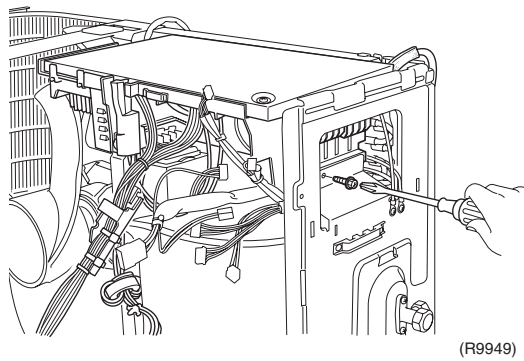
Step	Procedure	Points
7	Disconnect the connector for the overload protector [S40].	[S40] : Overload protector
8	Disconnect the connectors [S20], [S21], and [S80].	[S20] : (white) Electronic expansion valve coil for room A [S21] : (red) Electronic expansion valve coil for room B [S80] : Four way valve coil
9	Disconnect the connector for the relay harness of compressor.	
10	Disconnect the 2 connectors for the reactor.	



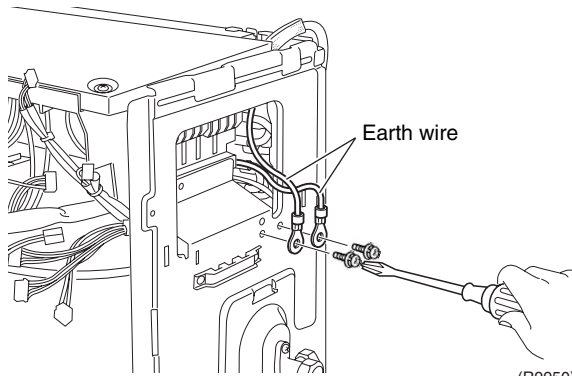


Step	Procedure	Procedure	Points
11	Detach the discharge pipe thermistor.	 <p style="text-align: center;">Discharge pipe thermistor (R9946)</p>	<ul style="list-style-type: none"> <li>■ Meet the edge of the thermistor and the clip.</li> <li>■ Be careful not to lose the clip for the discharge pipe thermistor.</li> </ul> <div style="text-align: center;">  <p>Thermistor Discharge pipe Clip Cross section (R10346)</p> </div>
12	Disconnect the connector for the thermistor ASSY [S90].	 <p style="text-align: center;">[S90] (R9947)</p>	<p>[S90] : Thermistor ASSY (Outdoor air, Heat exchanger, Discharge pipe)</p>
13	Undo the wire clamp for the thermistor ASSY under the electrical box.	 <p style="text-align: center;">(R7588)</p>	 <p style="text-align: center;">Wire clamp</p>
14	Cut the clamp.	 <p style="text-align: center;">Clamp (R9948)</p>	

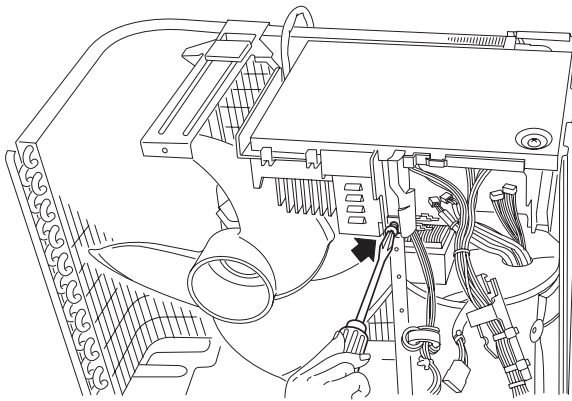
Step	Procedure	Points
15	Remove the screw on the right side of the electrical box.	
16	Remove the screws of earth wires.	
17	Remove the screw in front of the electrical box.	
18	Lift up the electrical box to remove.	



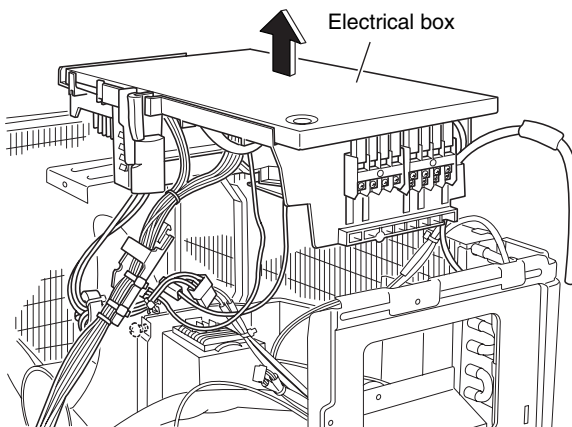
(R9949)



(R9950)



(R9951)



(R9952)

## 9. Removal of PCB

### Procedure

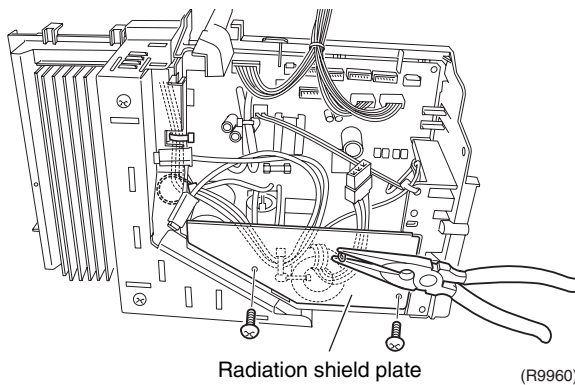
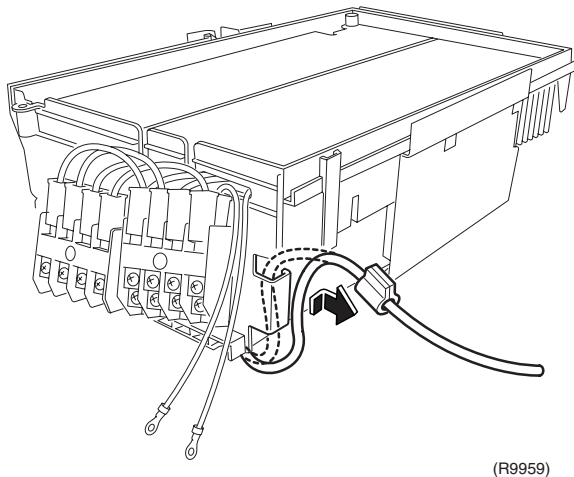
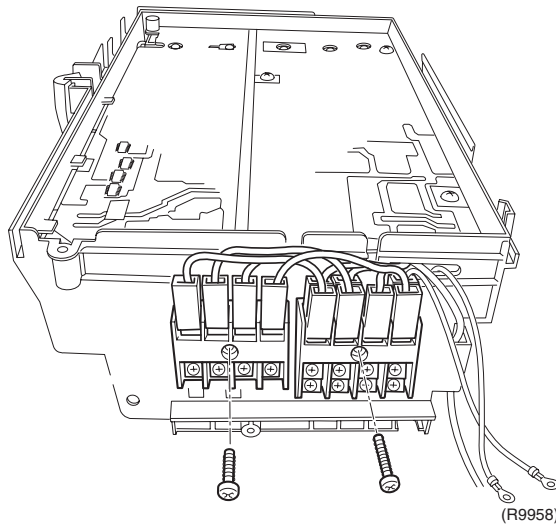


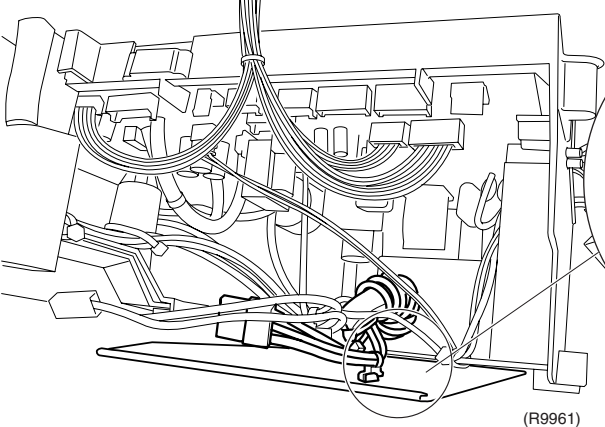
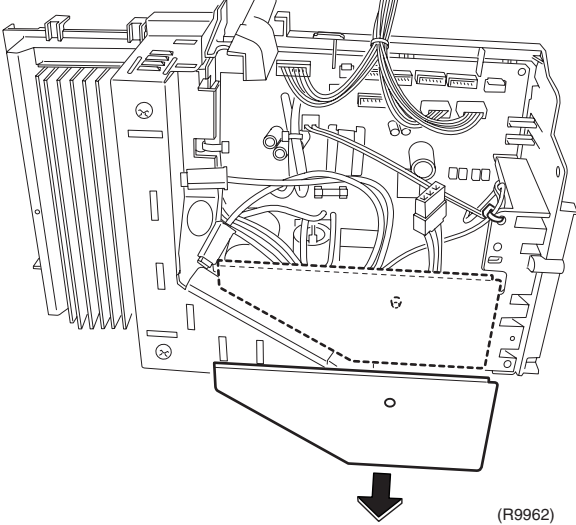
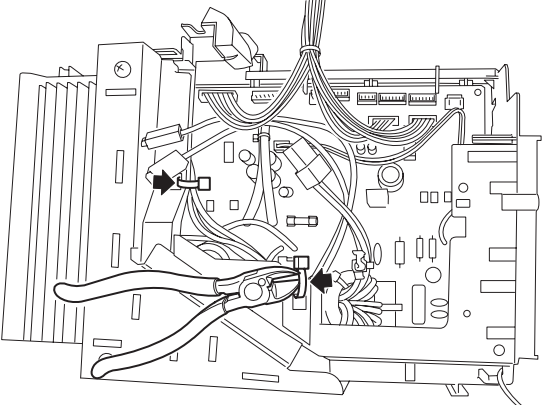
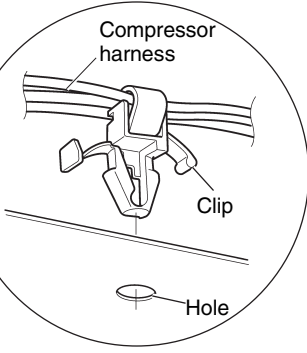
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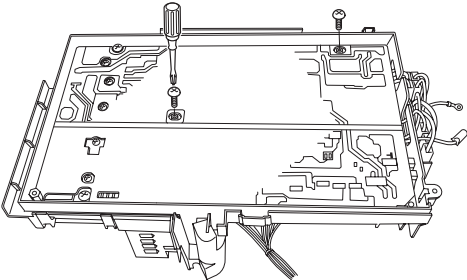
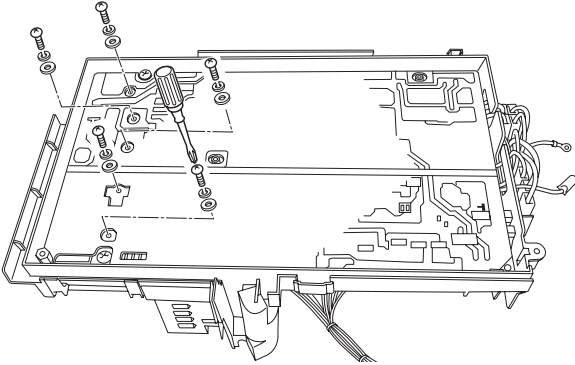
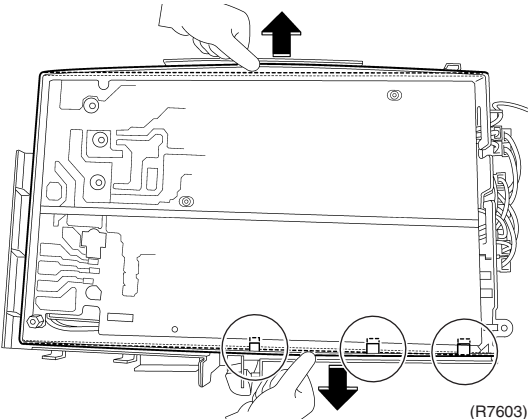
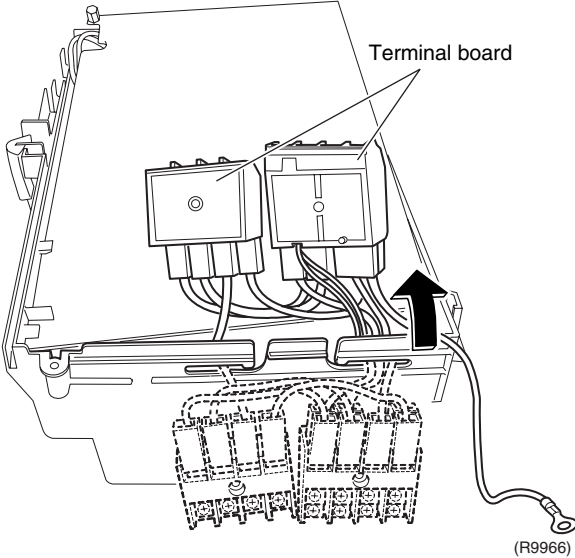
Be sure to wait 10 minutes or more after turning off all power supplies before disassembling work.

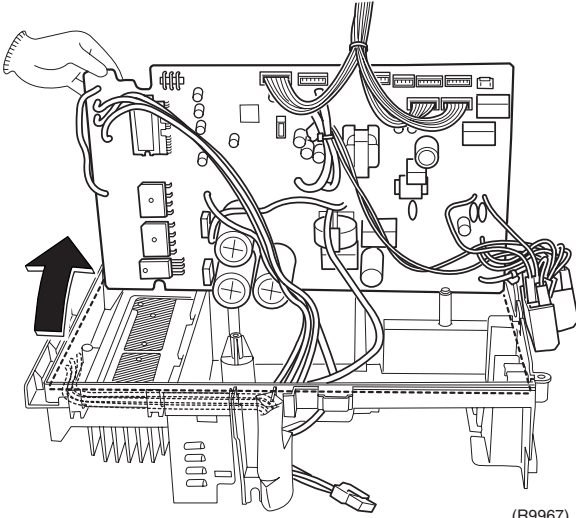
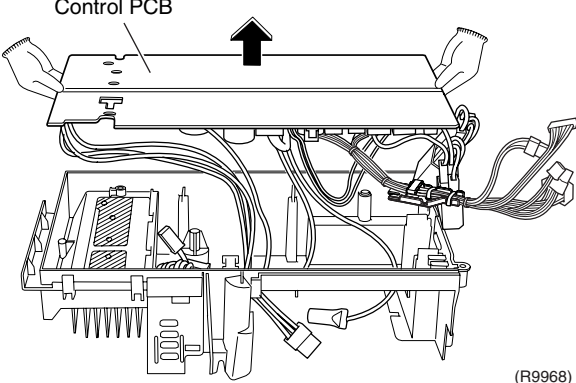
Step	Procedure	Points
1. Removal of the control PCB	<p>Electrical box (cover)</p> <p>(R9955)</p> <p>(R9956)</p> <p>Insulation sheet</p> <p>Earth wire</p> <p>(R18593)</p>	<p><b>Preparation</b></p> <ul style="list-style-type: none"> <li>■ Remove the panels, plates, and electrical box according to the removal procedure.</li> <li>■ The control PCB is adopted upside-down.</li> <li>■ The lead-free solder (PbF) is used on PCB. When exchange, use exclusive solder and soldering gun.</li> </ul> <ul style="list-style-type: none"> <li>■ The trimmed part goes front.</li> <li>■ The terminal board is united with thermal fuse.</li> </ul>
1 Remove the screw of the electrical box cover.		
2 Detach the insulation sheet.		

Step	Procedure	Points
3	Remove the 2 screws of the terminal boards.	
4	Release the outdoor air thermistor from the hook.	
5	Remove the 2 screws and detach the 1 clip to remove the radiation shield plate.	



Step	Procedure	Points
<p>6 Cut off the clamps at 2 locations and disconnect the wire harnesses.</p>	 <p>(R9961)</p>  <p>(R9962)</p>  <p>(R9963)</p>	 <p>Compressor harness</p> <p>Clip</p> <p>Hole</p> <ul style="list-style-type: none"> <li>■ The clip is push mount type.</li> </ul>

Step	Procedure	Points
7	<p>Remove the 7 screws.</p>  <p>(R9964)</p>  <p>(R9965)</p>	
8	<p>Lift up the back side slightly and release the hooks of the front.</p>  <p>(R7603)</p>	<ul style="list-style-type: none"> <li>When reassembling, make sure that the hooks of the electrical box are placed on the PCB.</li> </ul>
9	<p>Release the lead wires from the hook and remove the terminal boards.</p>  <p>Terminal board</p> <p>(R9966)</p>	

Step	Procedure	Points
10	<p data-bbox="199 790 459 853">Lift up the control PCB to remove.</p>  <p data-bbox="1002 745 1062 768">(R9967)</p>  <p data-bbox="1002 1193 1062 1216">(R9968)</p>	

Step	Procedure	Points	Points
11	Control PCB	<p>(R9969)</p>	<p>[S20] : Electronic expansion valve coil for room A                  [S21] : Electronic expansion valve coil for room B                  [S22] : Damper motor                  [S23] : Rotor motor                  [S40] : Overload protector                  [S70] : DC Fan motor                  [S72] : Humidifying fan motor                  [S80] : Four way valve coil                  [S90] : Discharge pipe / Outdoor heat exchanger / Outdoor air thermistor                  [S91] : Gas pipe thermistor                  [S92] : Liquid pipe thermistor</p>
12	Remove the 2 screws of the radiation fin.	<p>(R9970)</p> <p>Radiation fan (R9971)</p>	<p>■ When reassembling, be sure to apply silicon grease for encouraging the heat radiation.</p>



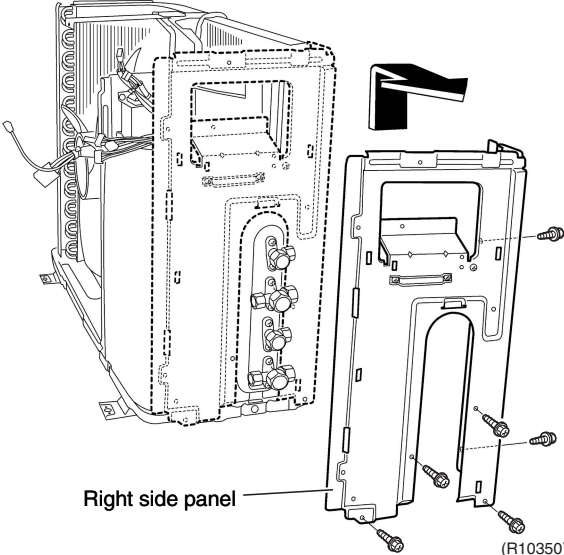
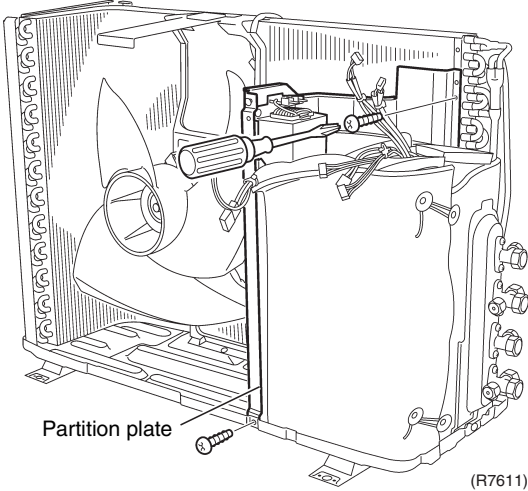
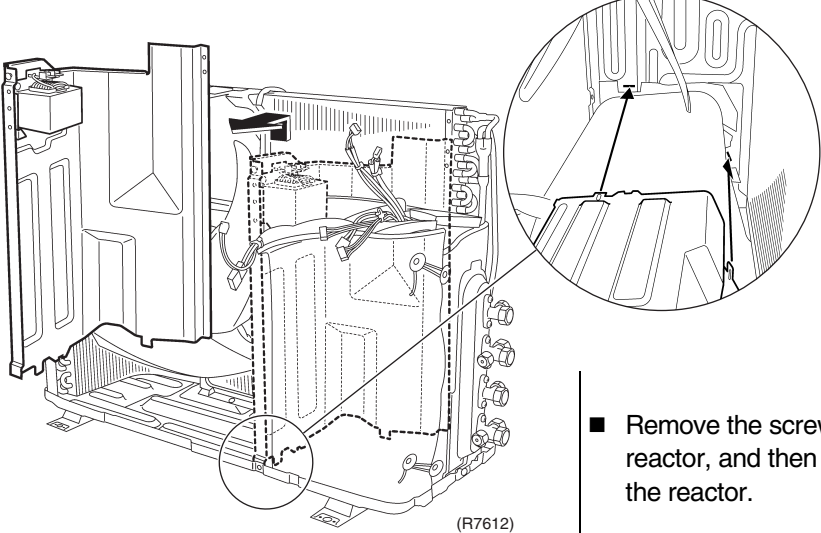
# 10. Removal of Sound Blankets

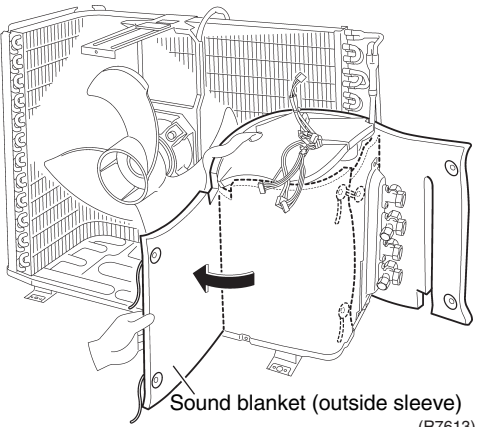
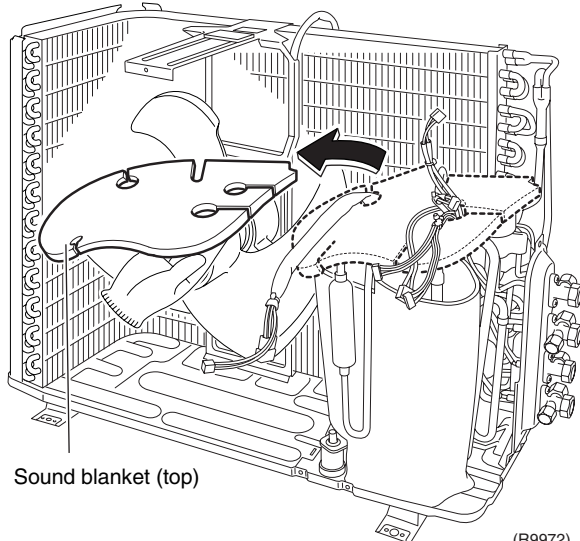
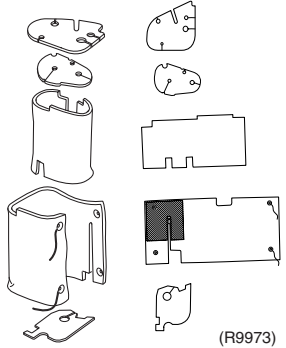
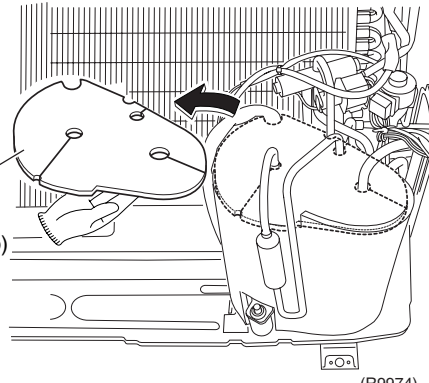
## Procedure

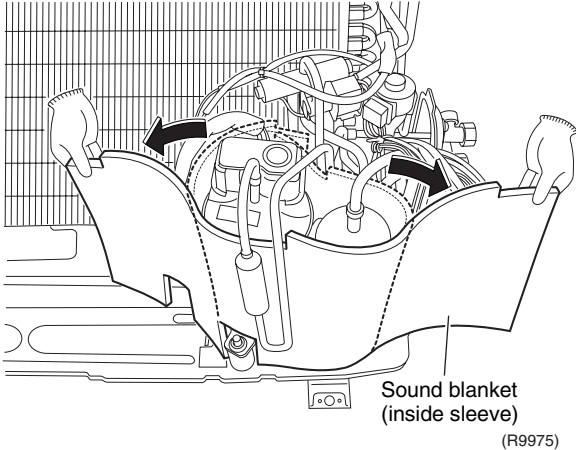
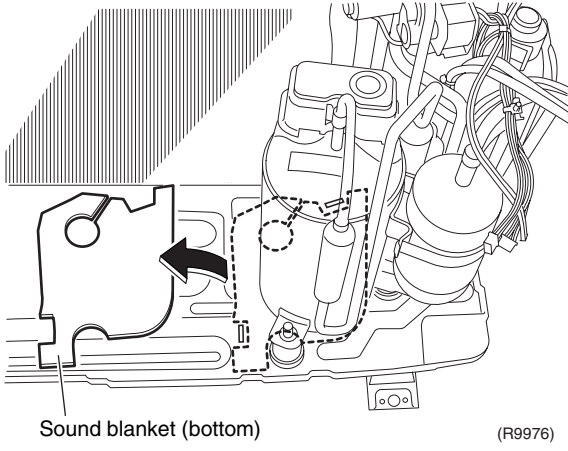


### Warning

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

Step	Procedure	Points
1. Removal of the right side panel  1 Remove the 6 screws to remove the right side panel.	 <p>Right side panel</p> <p>(R10350)</p>	<b>Preparation</b> <ul style="list-style-type: none"> <li>Remove the electrical box beforehand.</li> </ul>
2. Removal of the partition plate  1 Remove the 2 screws to remove the partition plate.  2 Since there are hooks on the partition plate, lift up once and pull out toward yourself to remove it.	 <p>Partition plate</p> <p>(R7611)</p>  <p>Reactor</p> <p>(R7612)</p>	<ul style="list-style-type: none"> <li>When reassembling, make sure to catch the lower hook of the partition plate.</li> <li>Remove the screw of the reactor, and then remove the reactor.</li> </ul>

Step	Procedure	Points
3. Removal of the sound blanket		
1	<p>Release the fixing strings, open the sound blanket (outside sleeve) and pull it out.</p>  <p>Sound blanket (outside sleeve) (R7613)</p>	
2	<p>Lift up the sound blanket (top) to remove.</p>  <p>Sound blanket (top) (R9972)</p>	<ul style="list-style-type: none"> <li>Since the piping ports are torn easily, remove the blanket carefully.</li> </ul>  <p>(R9973)</p>
3	<p>Lift up the sound blanket (inside-top) to remove.</p>  <p>Sound blanket (inside-top) (R9974)</p>	<ul style="list-style-type: none"> <li>The sound blanket (inside-top) is attached only for 40 class.</li> </ul>

Step	Procedure	Points
4	<p>Open the sound blanket (inside sleeve) and pull it out.</p> 	
5	<p>Pull out the sound blanket (bottom).</p> 	

# 11. Removal of Propeller Fan / Fan Motor

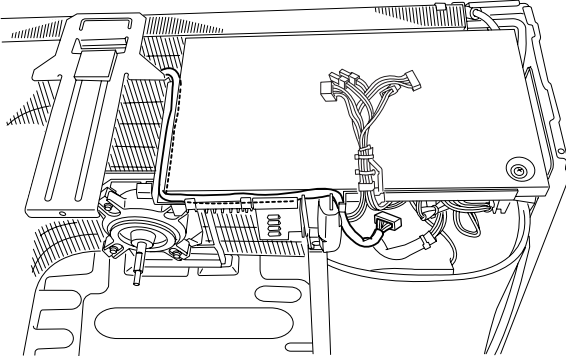
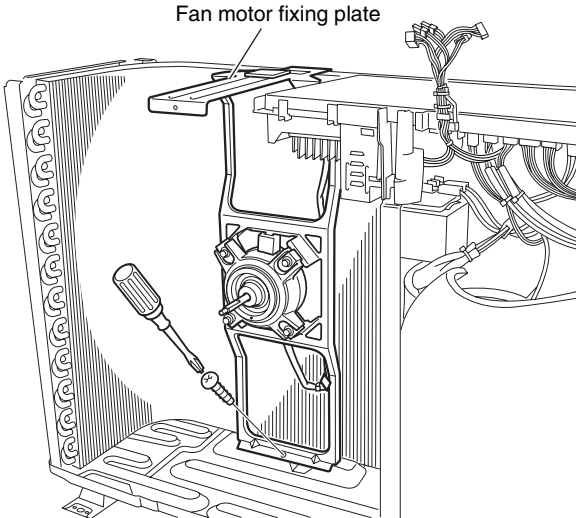
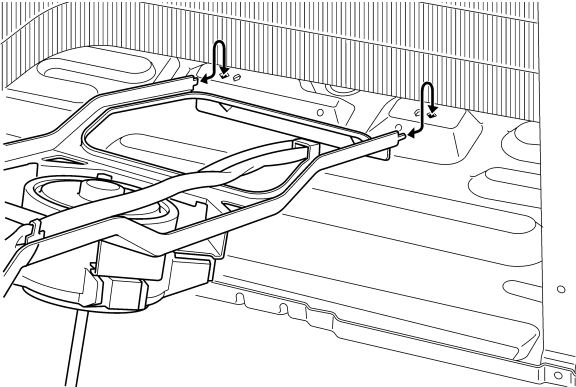
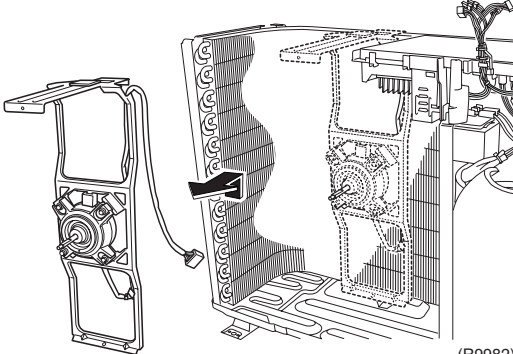
**Procedure**



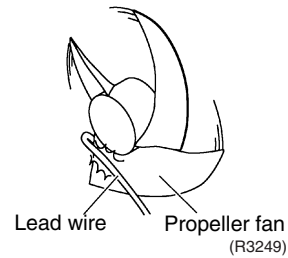
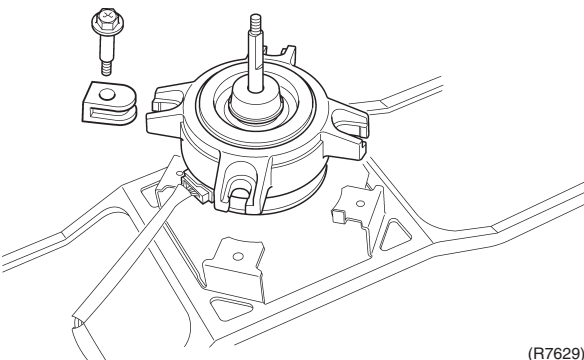
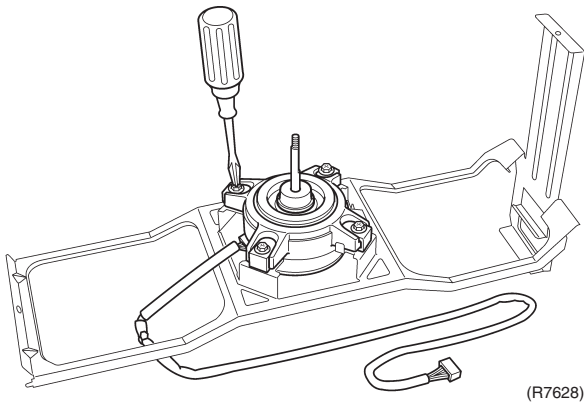
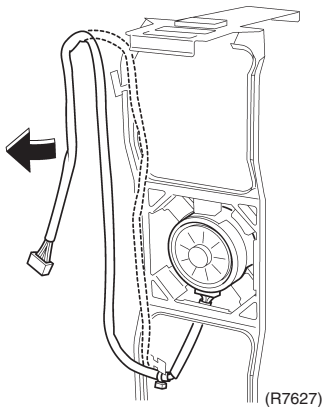
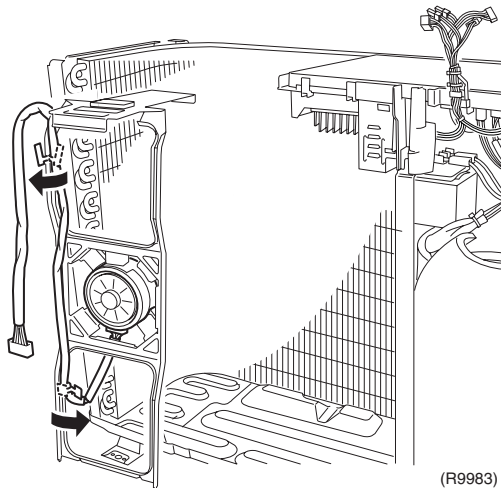
**Warning**

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

Step	Procedure	Points
<p>1. Removal of the propeller fan</p> <p>1 Unscrew the washer fitted nut (M6) to remove the propeller fan.</p>	<p style="text-align: center;">Propeller fan (R9977)</p> <p style="text-align: center;">(R9978)</p> <p style="text-align: center;">(R7620)</p>	<ul style="list-style-type: none"> <li>■ Wrench size: 10mm</li>   <li>■ When reassembling, align the ▼ mark of the outdoor fan with the D-cut section of the motor shaft.</li> </ul>
<p>2. Removal of the fan motor</p> <p>1 Disconnect the connector [S70] for the fan motor from the PCB.</p>	<p style="text-align: center;">(R9979)</p>	

Step	Procedure	Points
2	<p>The figure shows the arrangement of the fan motor lead wire.</p>  <p>(R9980)</p>	
3	<p>Remove the screw to remove the fan motor fixing plate.</p>  <p>Fan motor fixing plate</p> <p>(R9981)</p>  <p>(R7624)</p>	<ul style="list-style-type: none"> <li>■ When reassembling, make sure the ● mark of the fan motor goes down.</li>   <li>■ When reassembling, fit the 2 lower hooks into the bottom frame.</li> </ul>
4	<p>Remove out the fan motor fixing plate toward yourself.</p>  <p>(R9982)</p>	

Step	Procedure	Points
5	Turn the fan motor fixing plate backward and undo the 2 fixing hooks of the lead wire.	
6	Release the fan motor lead wire.	<ul style="list-style-type: none"> <li>■ When reassembling, put the lead wire through the back of the motor (so as not to be entangled with the propeller fan).</li> </ul>
7	Remove the 4 screws and 4 rubber vibration isolators to remove the fan motor.	

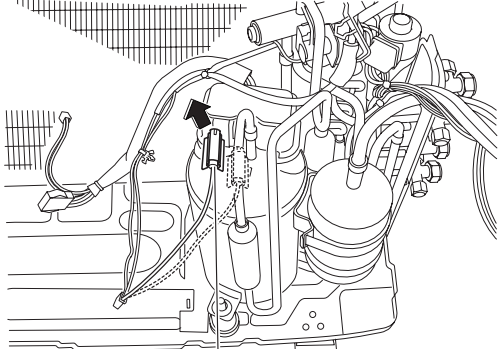
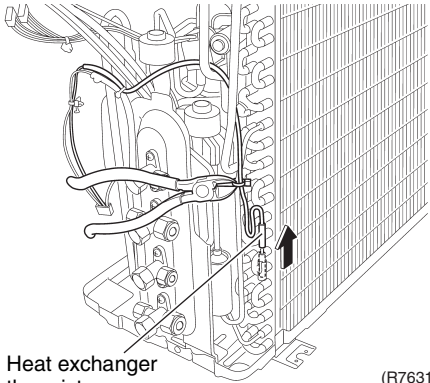
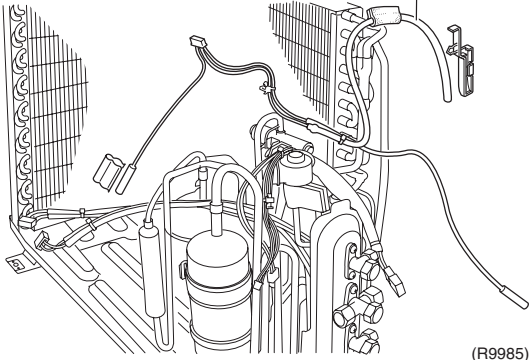
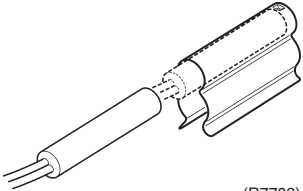
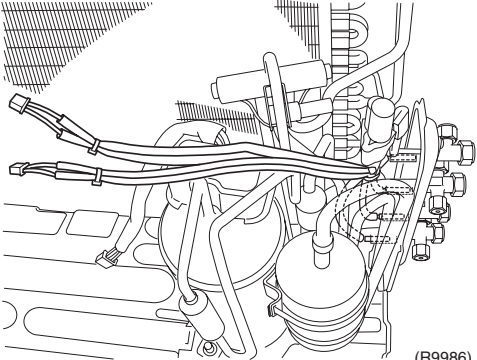


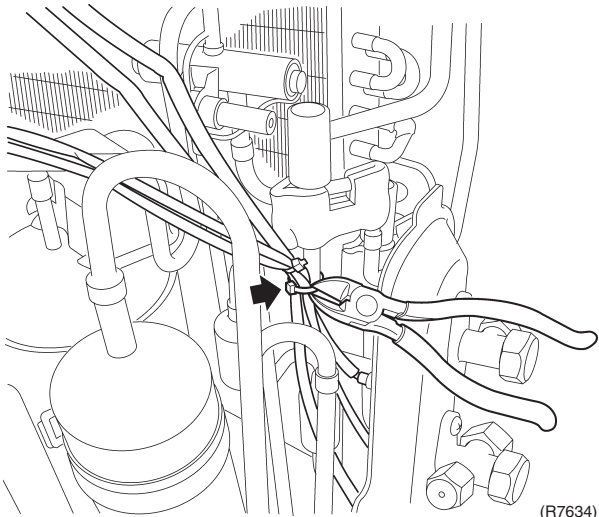
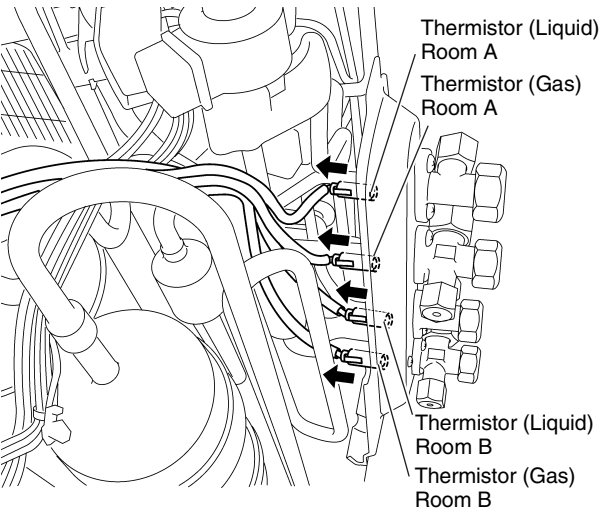
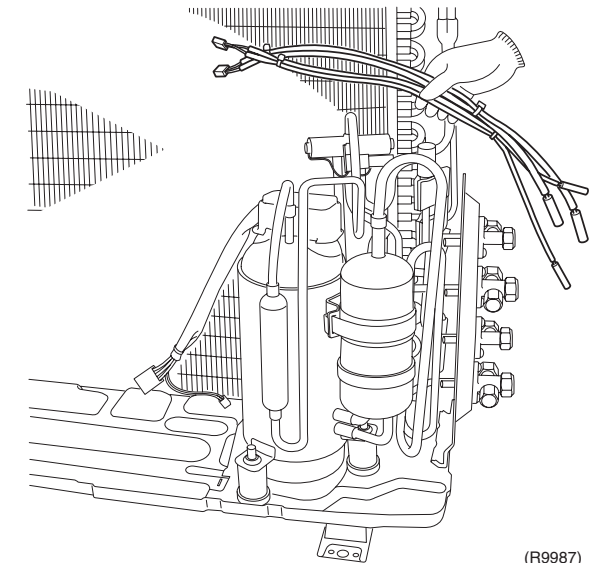
# 12. Removal of Thermistors

**Procedure**



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

Step	Procedure	Points
<p>1. Removal of the assembly of thermistor</p> <p>1 Undo the clip and remove the discharge pipe thermistor.</p> <p>2 Cut off the clamp to pull out the outdoor heat exchanger thermistor.</p> <p>3 The outdoor air / discharge pipe / outdoor heat exchanger thermistors are united as one assembly.</p> <p>4 The figure shows the arrangement of the assembly of thermistor [S90].</p>	 <p>Discharge pipe thermistor (R9984)</p>  <p>Heat exchanger thermistor (R7631)</p>  <p>Outdoor air thermistor (R9985)</p>	<ul style="list-style-type: none"> <li>■ Be careful not to lose the clip for the discharge pipe thermistor.</li> </ul>  <p>(R7702)</p> <ul style="list-style-type: none"> <li>■ Be careful not to lose the clips for each thermistor.</li> </ul>
<p>2. Removal of the liquid / gas pipe thermistors</p> <p>1 Remove the liquid / gas pipe thermistors.</p>	 <p>(R9986)</p>	

Step	Procedure	Points
2	Cut off the clamp.	 <p>(R7634)</p>
3	<p>Open the putty and remove the each thermistor.</p> <p>[S91] : Gas pipe thermistor Room A (Black) Room B (Gray)</p> <p>[S92] : Liquid pipe thermistor Room A (Black) Room B (Gray)</p>	 <p>Thermistor (Liquid) Room A Thermistor (Gas) Room A Thermistor (Liquid) Room B Thermistor (Gas) Room B</p> <p>(R7635)</p>
4	The figure shows the arrangement of the assembly of the liquid / gas thermistors.	 <p>(R9987)</p> <ul style="list-style-type: none"> <li>■ When reassembling, meet the edge of the thermistor and the clip.</li> </ul>



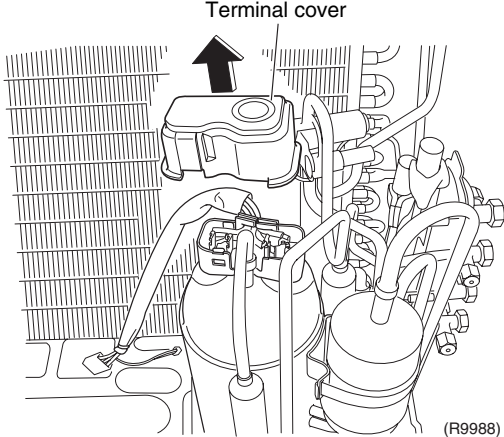
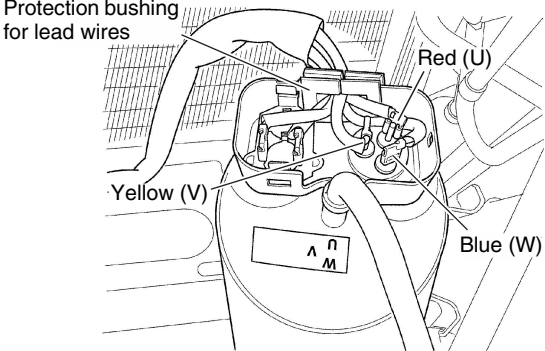
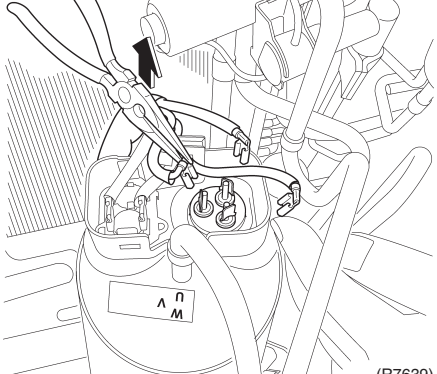
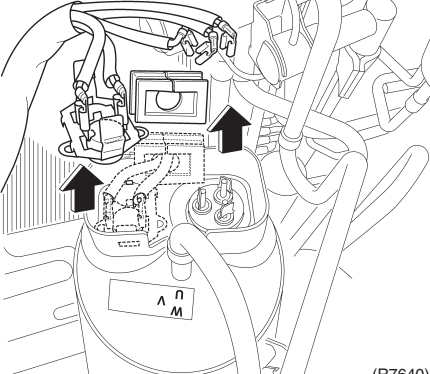
# 13. Removal of Compressor

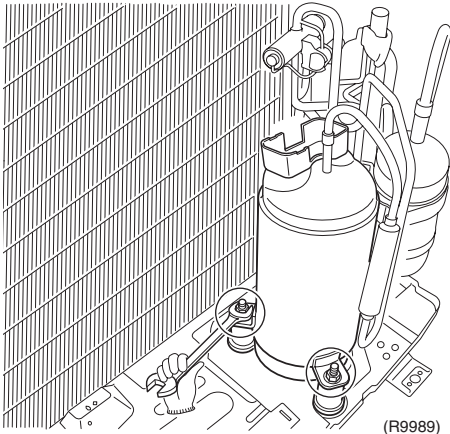
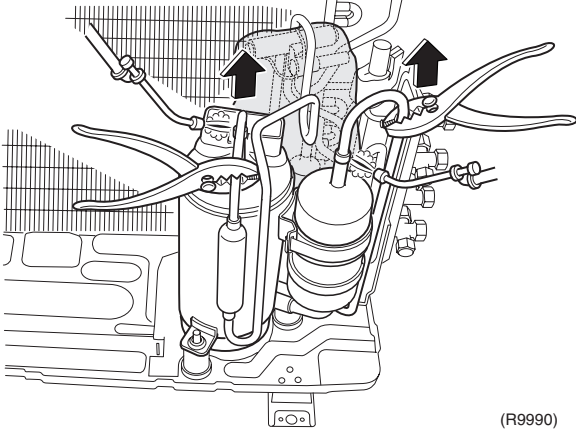
## Procedure

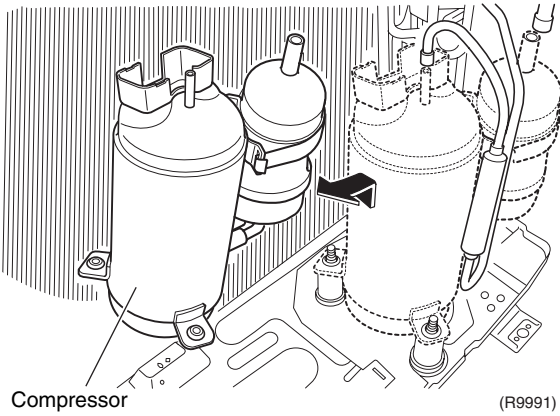


### Warning

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>Terminal cover</p> <p>(R9988)</p>	<ul style="list-style-type: none"> <li>Be careful so as not to burn the compressor terminals or the name plate.</li> </ul>
2	Disconnect the flag-shaped terminals.	 <p>Protection bushing for lead wires</p> <p>Red (U)</p> <p>Yellow (V)</p> <p>Blue (W)</p> <p>(R7638)</p>	
3	Detach the terminals by long nose pliers. Undo the hooks by a flat screwdriver to remove the overload protector.	 <p>(R7639)</p>	
4	Detach the overload protector.	 <p>(R7640)</p>	

Step	Procedure	Points
5	<p>Remove the 2 nuts with an open-end spanner.</p>  <p>(R9989)</p>	<p><b>Warning</b> Since it may happen that refrigerant oil in the compressor catches fire, prepare wet cloth so as to extinguish fire immediately.</p> <p><b>Warning</b> Ventilate when refrigerant leaks during the work. (If refrigerant contacts fire, it causes to arise toxic gas.)</p> <p><b>Warning</b> Be careful about the four way valve, pipes and so on, which were heated up by a gas brazing machine, so as not to get burnt your hands.</p>
<p>■ Before working, make sure that the refrigerant is empty in the circuit. ■ Be sure to apply nitrogen replacement when heating up the brazed part.</p>	 <p>(R9990)</p>	<p><b>Caution</b> From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to recover the refrigerant gas with the recovery system.</p>
6	Heat up the brazed part of the discharge side and disconnect.	
7	Heat up the brazed part of the suction side and disconnect.	
8	Lift the compressor up to remove.	



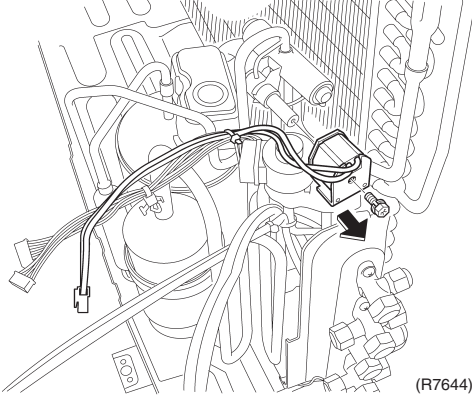
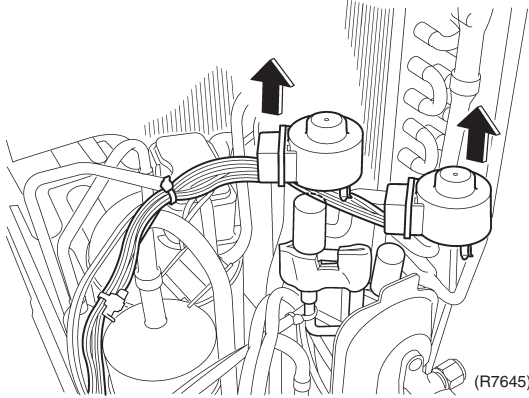
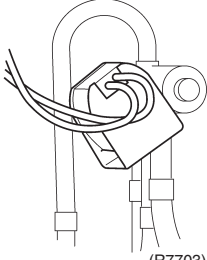
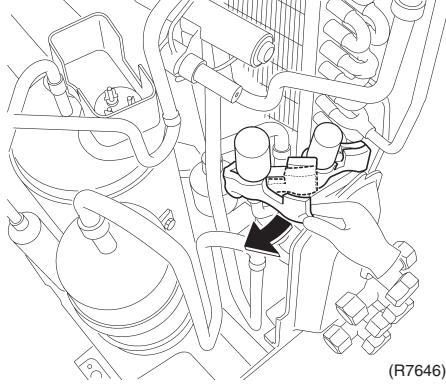
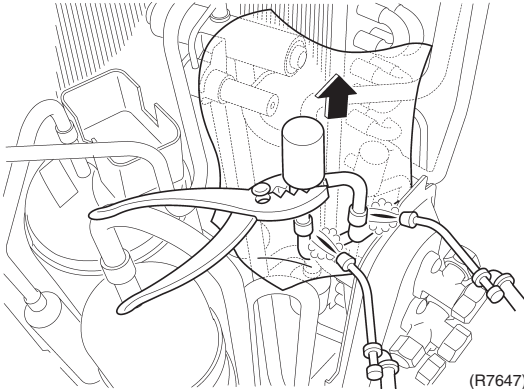
# 14. Removal of Four Way Valve / Electronic Expansion Valve




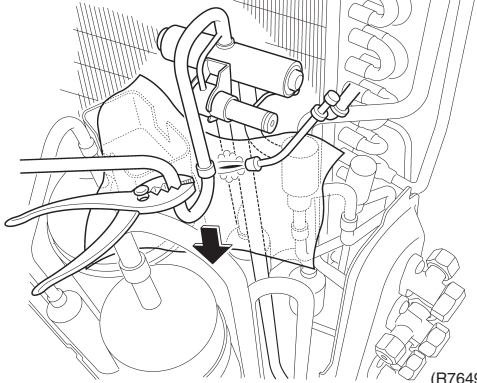
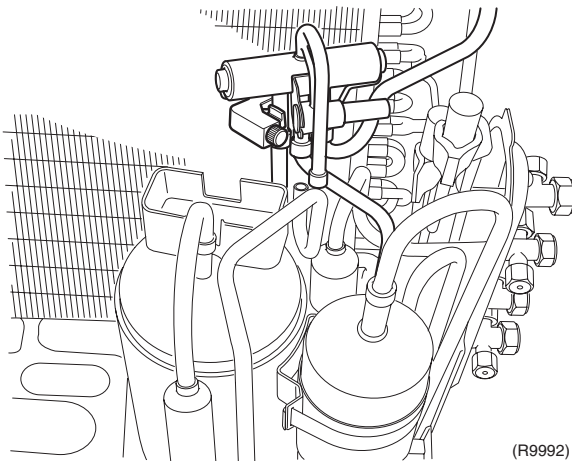
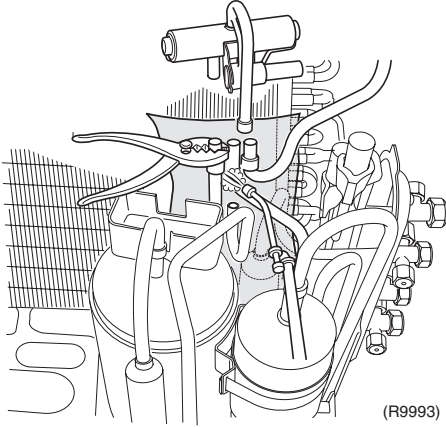
## Procedure



### Warning

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

Step	Procedure	Points
1. Removal of the peripheries		<ul style="list-style-type: none"> <li>■ Remove the sound blanket beforehand.</li> </ul>
	<p>Remove:</p> <ul style="list-style-type: none"> <li>• Terminal cover of compressor</li> <li>• Four way valve coil</li> <li>• Electronic expansion valve coil</li> </ul> <p>not to burn them by a gas brazing machine.</p>	<p><b>Warning</b> Be careful about the four way valve, pipes and so on, which were heated up by a gas brazing machine, so as not to get burnt your hands.</p> <p><b>Caution</b> From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to recover the refrigerant gas with the recovery system.</p>
1	Lift up the electronic expansion valve coils to remove it.	 <p>(R7644)</p>  <p>(R7645)</p>
2	Remove the putty.	 <p>(R7703)</p> <ul style="list-style-type: none"> <li>■ Detach the four way valve coil and the 2 clamps, and then detach the wire harnesses.</li> </ul>
3	Heat up the 2 brazed parts of the electronic expansion valve and remove it.	 <p>(R7646)</p>  <p>(R7647)</p>

Step	Procedure	Points
<ul style="list-style-type: none"> <li>■ Before working, make sure that the refrigerant is empty in the circuit.</li> <li>■ Be sure to apply nitrogen replacement when heating up the brazed part.</li> </ul>		<p><b>Reassembling precautions</b></p> <ol style="list-style-type: none"> <li>1. Use non-oxidizing brazing method. If nitrogen gas is not available, braze the parts speedily.</li> <li>2. Avoid deterioration of the gaskets due to carbonization of oil inside the four way valve or thermal influence. For this purpose, wrap the four way valve with wet cloth. Splash water over the cloth against becoming too hot (keep it below 120°C).</li> </ol> <ul style="list-style-type: none"> <li>■ In pulling the pipes, be careful not to over-tighten them with pliers. The pipes may get deformed.</li> </ul>
<p>4 Provide a protective sheet or a steel plate so that the brazing flame cannot influence peripheries around the four way valve.</p> <p> <b>Warning</b> Since it may happen that refrigerant oil in the compressor catches fire, prepare wet cloth so as to extinguish fire immediately.</p> <p> <b>Warning</b> Ventilate when refrigerant leaks during the work. (If refrigerant contacts fire, it causes to arise toxic gas.)</p> <p> <b>Warning</b> Be careful about the four way valve, pipes and so on, which were heated up by a gas brazing machine, so as not to get burnt your hands.</p>	 <p style="text-align: right;">(R7649)</p>  <p style="text-align: right;">(R9992)</p>	<p><b>In case of the difficulty with a gas brazing machine</b></p> <ol style="list-style-type: none"> <li>1. Disconnect the brazed part where is easy to disconnect and restore.</li> <li>2. Cut pipes on the main unit by a miniature copper tube cutter in order to make it easy to disconnect.</li> </ol> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>■ Do not use a metal saw for cutting pipes by all means because the sawdust come into the circuit.</li> <li>■ The brazed parts are heated after being disconnected. To avoid a burn, make sure that the compressor is cooled down before removing.</li> </ul>
<p>5 Pull out the brazed part with pliers and disconnect.</p>	 <p style="text-align: right;">(R9993)</p>	

# Revision History

Month / Year	Version	Revised contents
02 / 2013	Si12-992	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.

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