






Si121094

REMOVAL PROCEDURE



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

7.0/8.0/8.5/9.0/10.0 kW Class 24000/32000 Btu/h Class

-  Outdoor Unit
-  Inverter
-  Multi Type



Service Manual Removal Procedure

Outdoor Unit

●Cooling Only

**2MKS70JVLT
2MKS80JVLT**

3MKS90EVLT

4MKS90EVMA

4MKS100EVLT

5MKS90E2V3B

●Heat Pump

**2MXS70JVLT
2MXS80JVLT**

3MXS90EVLT

3MXS24JVJU

4MXS80E2V3B

4MXS80EVMA

4MXS100EV2C

4MXS100EVLT

4MXS32GVJU

**4AMX80E2V3B
5MXS90E2V3B**

PMXS4GV2C

Table of Contents

1. Removal of Outer Panels	2
2. Removal of Electrical Box	16
3. Removal of PCBs	22
4. Removal of Fan Motor.....	26
5. Removal of Coils / Thermistors	27
6. Removal of Sound Blankets.....	32
7. Removal of Compressor	35



Note:

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

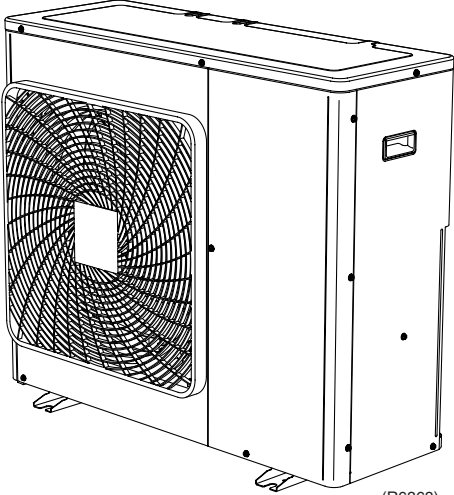
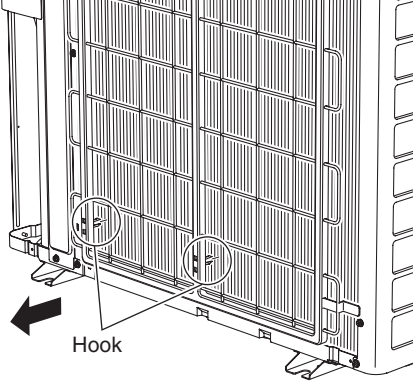
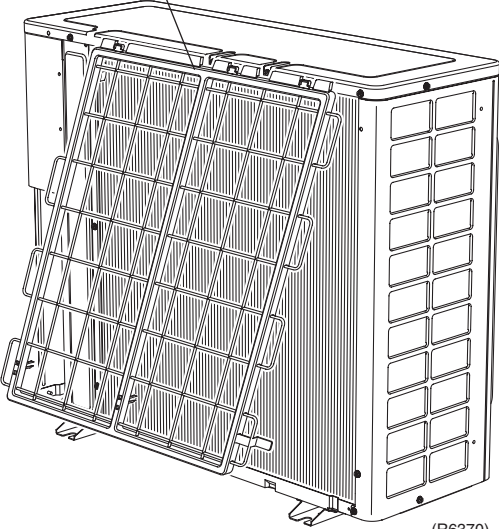
1. Removal of Outer Panels

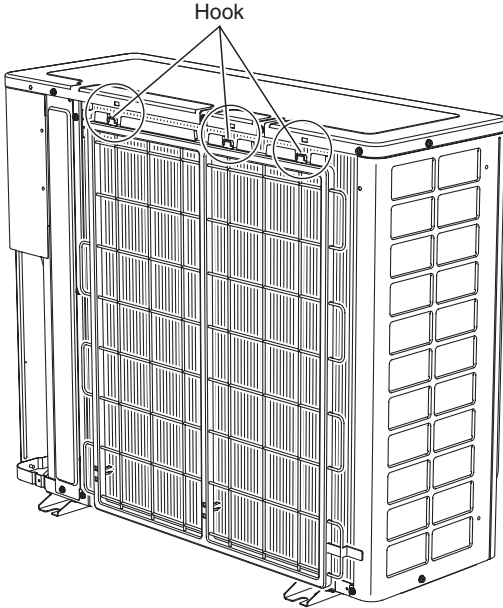
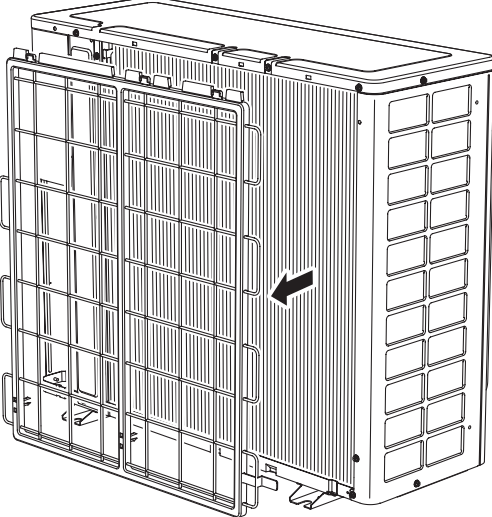
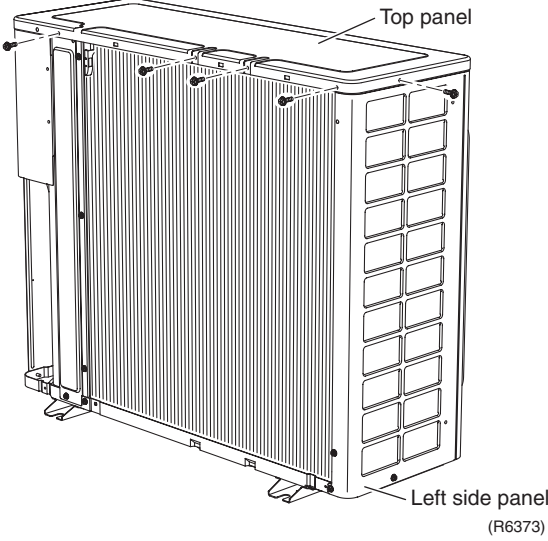
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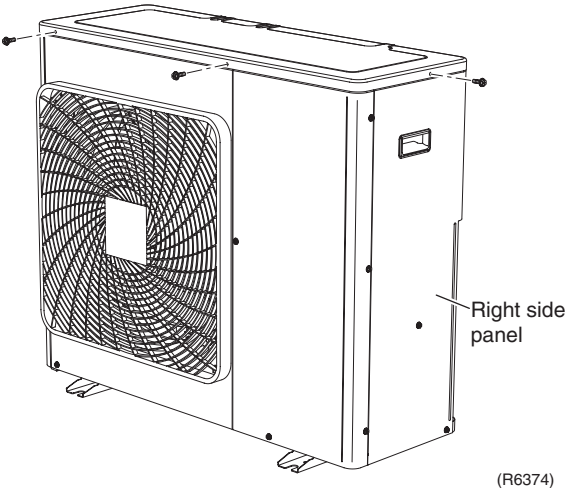
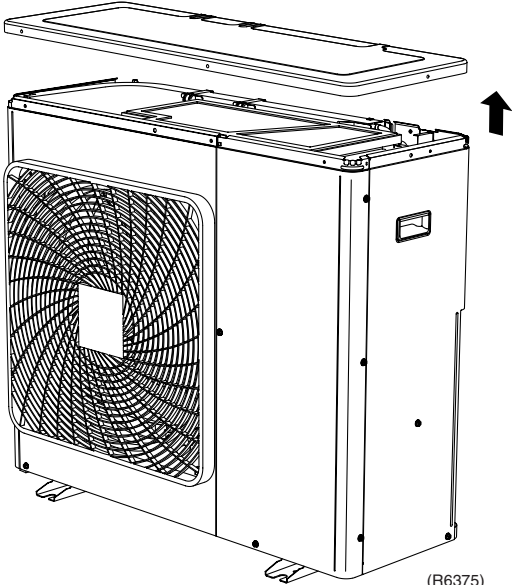
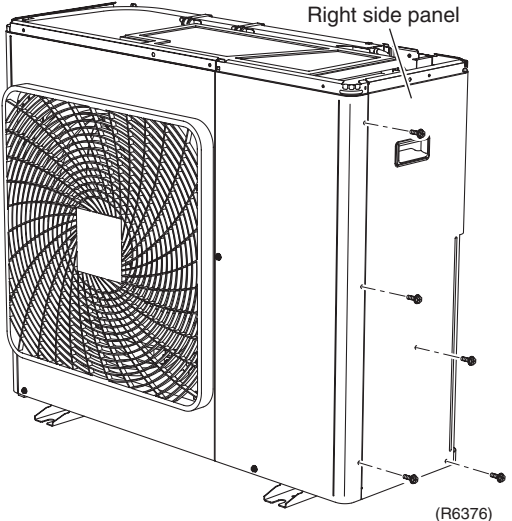


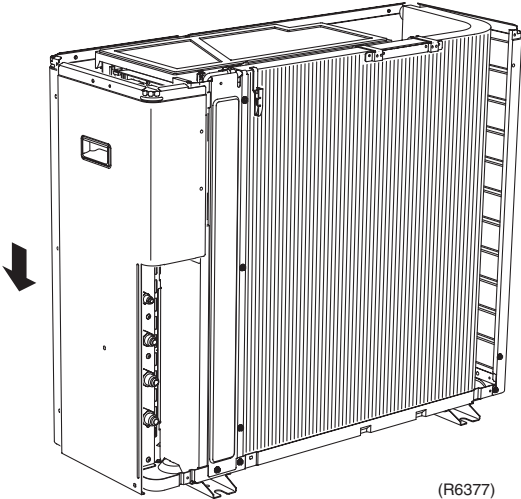
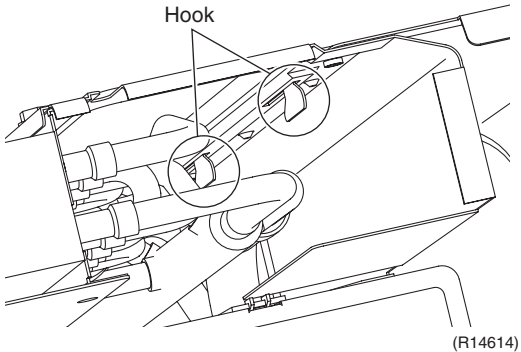
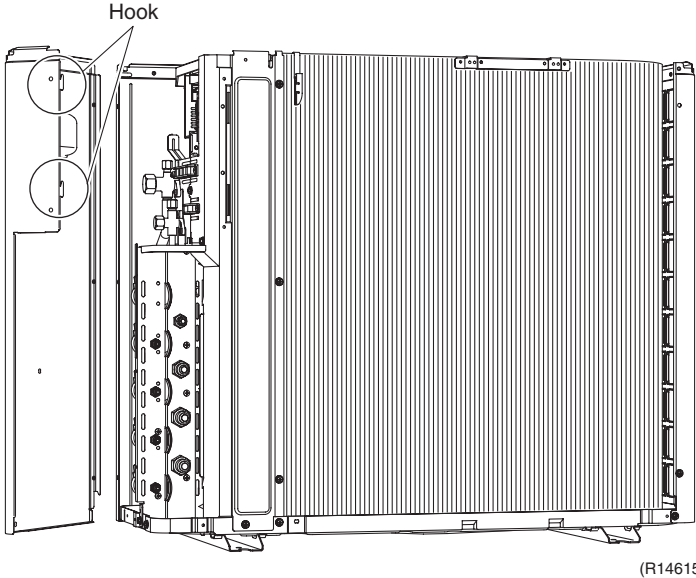
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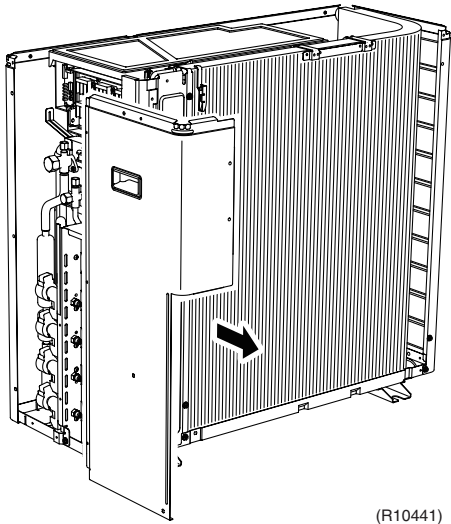
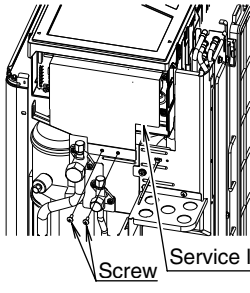
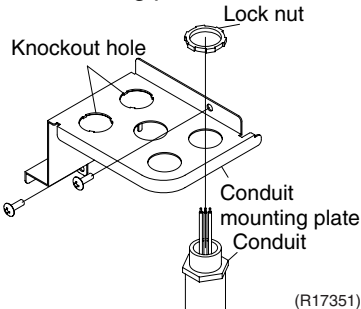
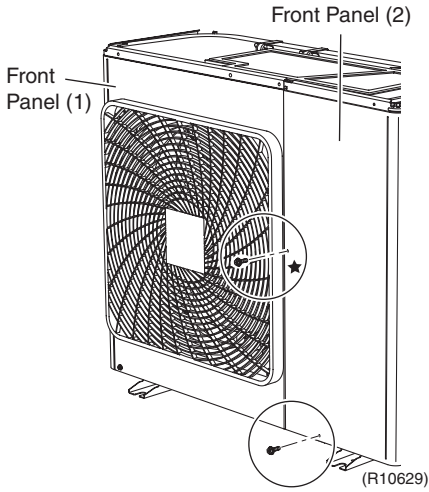
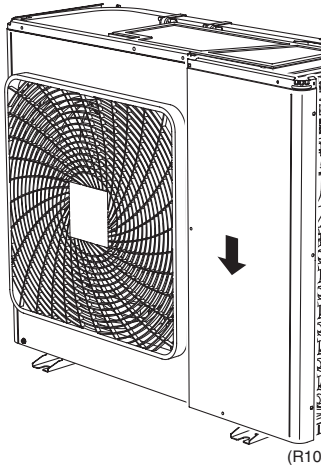
Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

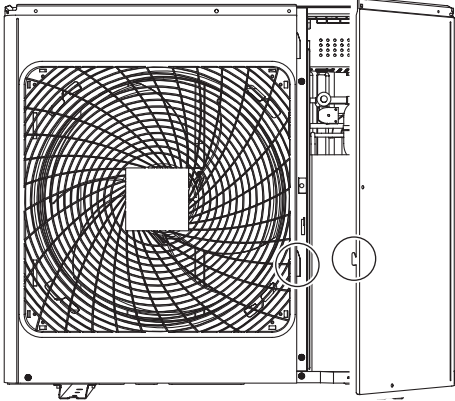
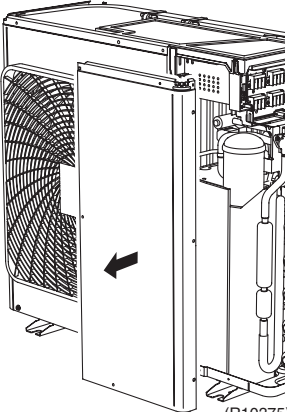
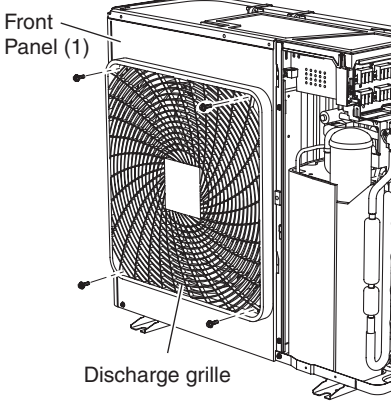
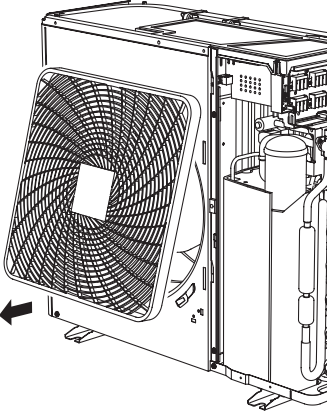
Step	Procedure	Points
Appearance features	 <p style="text-align: right;">(R6368)</p>	
<p>1. Remove the suction grille.</p> <p>1 Unfasten the 2 hooks at the bottom first.</p>	<p style="text-align: center;">Rear side</p>  <p style="text-align: center;">Hook</p> <p style="text-align: right;">(R14612)</p> <p style="text-align: center;">Suction grille</p>  <p style="text-align: right;">(R6370)</p>	<p>■ The hooks are secured in the clearances of the outdoor heat exchanger fins.</p>

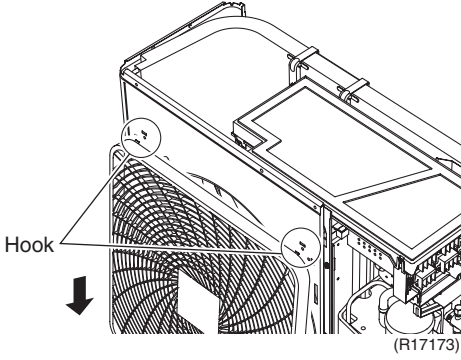
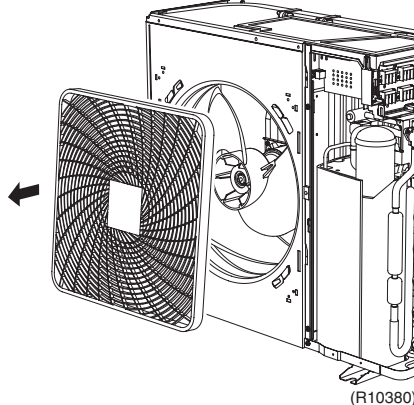
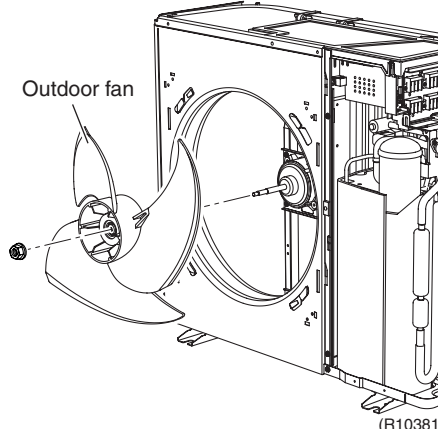
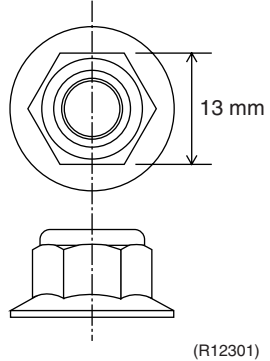
Step	Procedure	Points
2	<p>Slide the suction grille downward to unfasten the 3 top hooks.</p>  <p>(R14613)</p>	
3	<p>Remove the suction grille.</p>  <p>(R6372)</p>	
1	<p>Remove the 4 screws on the back and the screw on the left side panel.</p>  <p>(R6373)</p>	

Step	Procedure	Points
2	<p>Remove the 2 screws on the front and the screw on the right side panel.</p>  <p style="text-align: right;">(R6374)</p>	
3	<p>Lift the top panel and remove it.</p>  <p style="text-align: right;">(R6375)</p>	
3.	<p>Remove the right side panel.</p> <p>1 Remove the 5 screws.</p>  <p style="text-align: right;">(R6376)</p>	

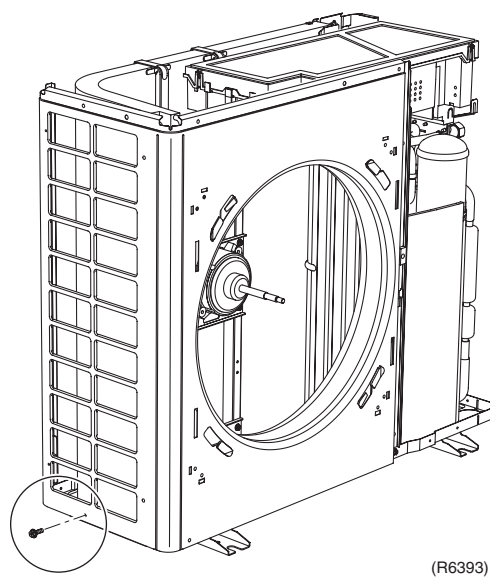
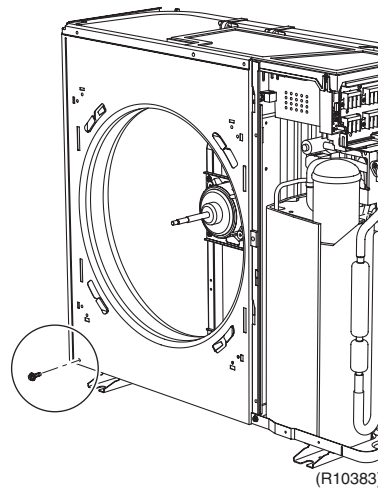
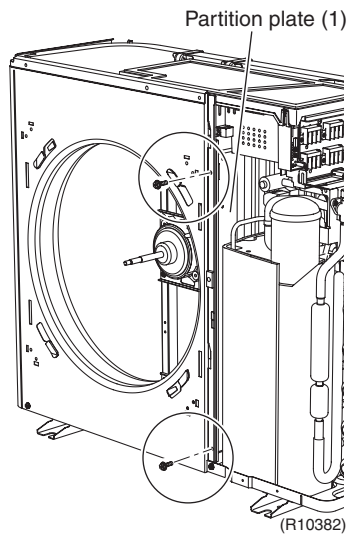
Step	Procedure	Points
2	Slide the right side panel downward to unfasten the 2 hooks on the back side.	
	 <p>(R6377)</p>	
	 <p>Hook</p> <p>(R14614)</p>	
	 <p>Hook</p> <p>(R14615)</p>	

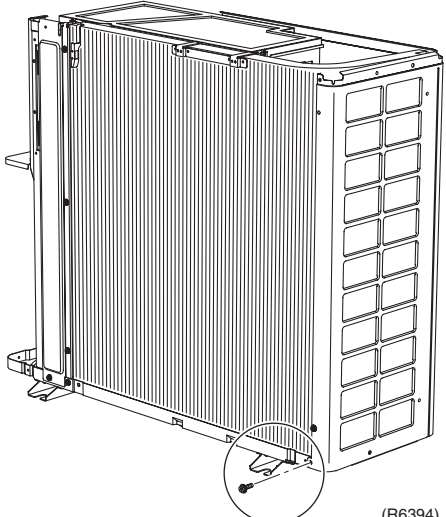
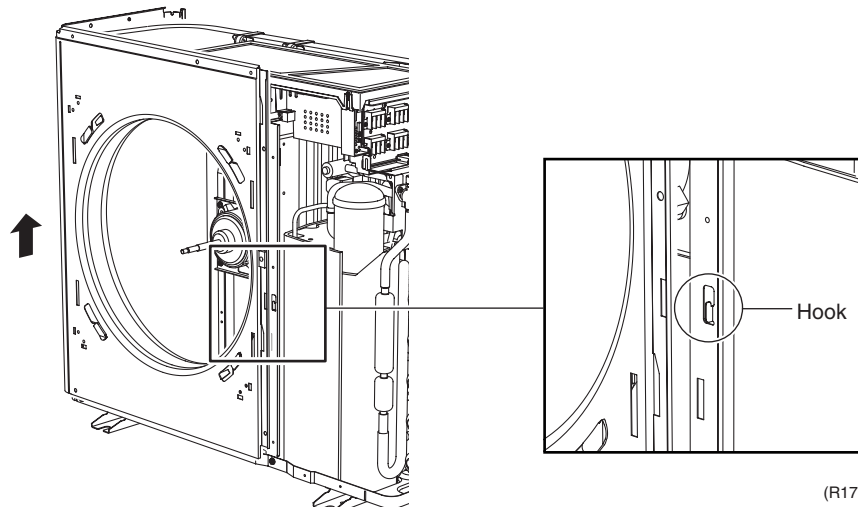
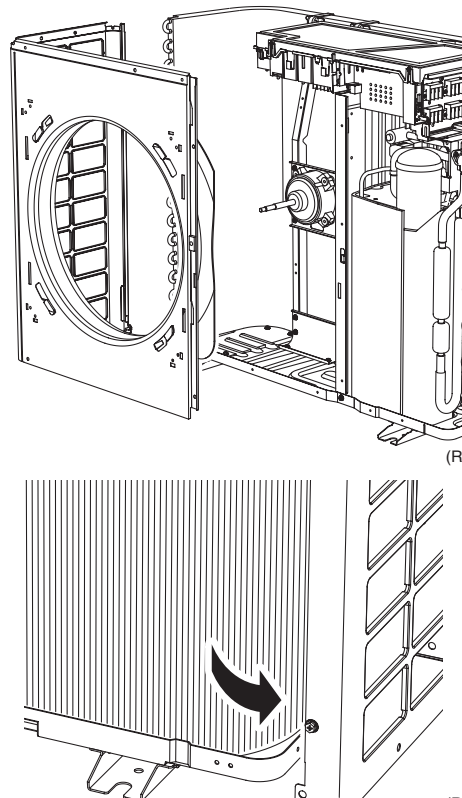
Step		Procedure	Points
3	Remove the right side panel.	 <p style="text-align: right;">(R10441)</p>	<ul style="list-style-type: none"> ■ The US model has a service lid on the stop valve mounting plate. Remove the 2 screws to remove the service lid.  <p style="text-align: right;">(R10372)</p> <ul style="list-style-type: none"> ■ The US model has a conduit mounting plate.  <p style="text-align: right;">(R17351)</p>
4.	Remove the front panel (2).		<ul style="list-style-type: none"> ★ This screw is M5 × 16
1	Remove the 2 screws.	 <p style="text-align: right;">(R10629)</p>  <p style="text-align: right;">(R10374)</p>	
	2	Slide the front panel (2) downward to unfasten the hook.	

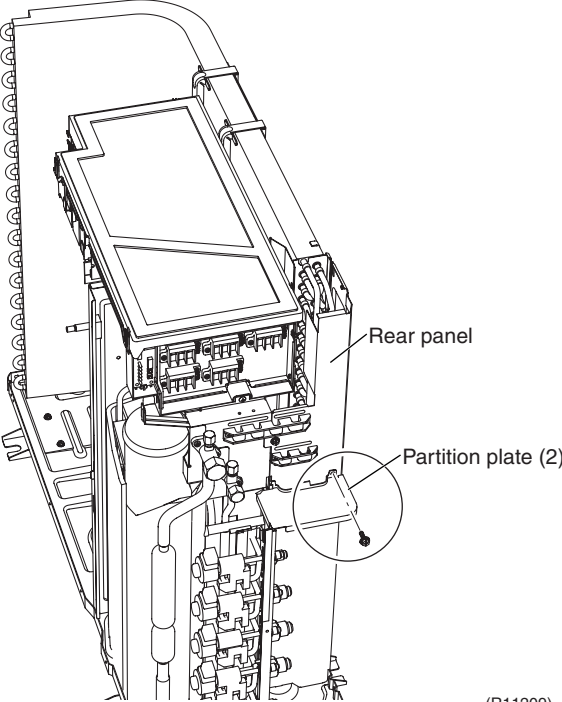
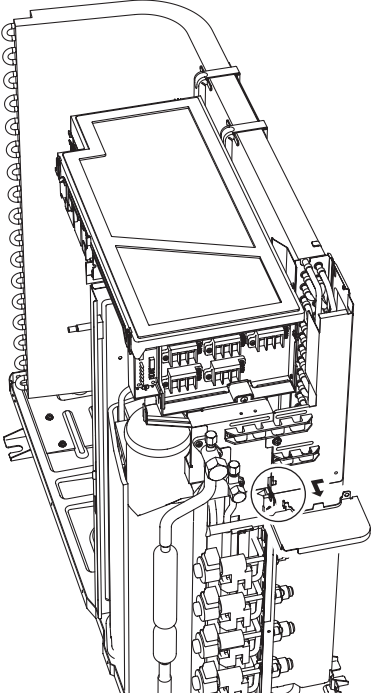
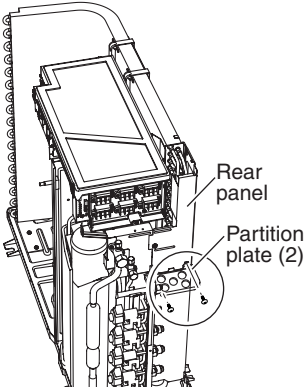
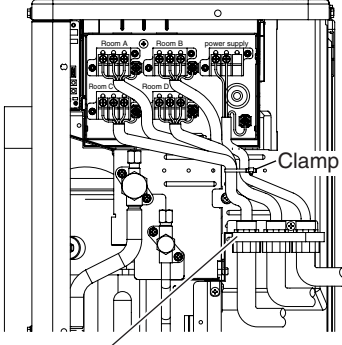
Step	Procedure	Points
3	<p>Remove the front panel (2).</p>  <p>(R6383)</p>  <p>(R10375)</p>	
5.	<p>Remove the front panel (1).</p>	<p>■ Remove the discharge grille and outdoor fan first to remove the front panel (1).</p>
1	<p>Remove the 4 screws on the discharge grille.</p>  <p>(R10376)</p>	
2	<p>Pull the bottom of the discharge grille.</p>  <p>(R10377)</p>	

Step	Procedure	Points
3	Slide the discharge grille downward to unfasten the 2 hooks at the top.	
4	Remove the discharge grille.	
5	Remove the nut and remove the outdoor fan.	 <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 45%;"> <p data-bbox="1093 1059 1284 1086">■ Nut size : M8</p>  </div> <div style="width: 50%;"> <p data-bbox="1093 1489 1452 1612">■ When reassembling, align the ▼ mark of the outdoor fan with the D-cut section of the motor shaft.</p> </div> </div>

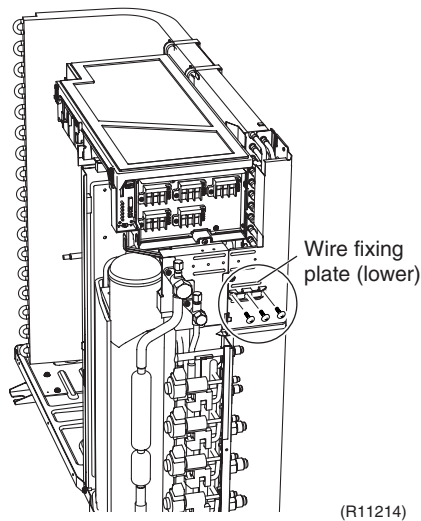
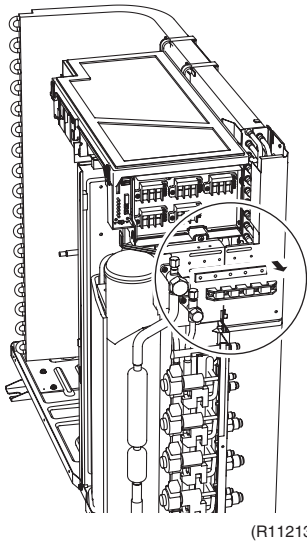
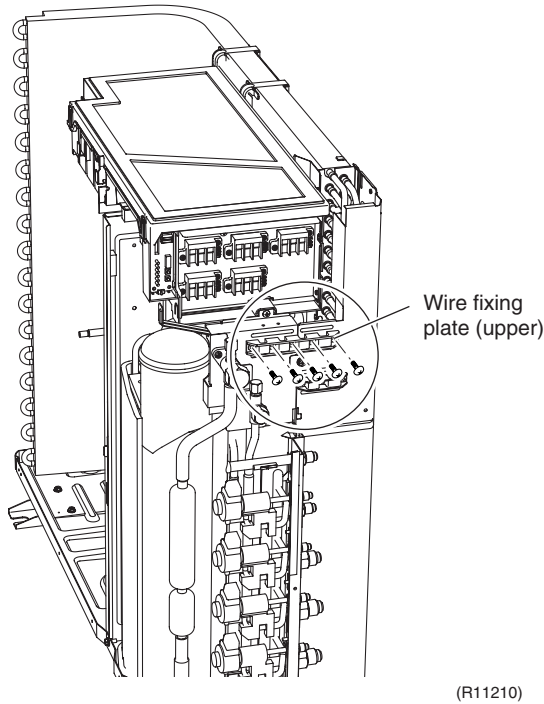
Step	Procedure	Points
6	Remove the 2 screws on the partition plate (1).	
7	Remove the screw at the bottom left of the front panel (1).	
8	Remove the screw at the bottom of the left side.	

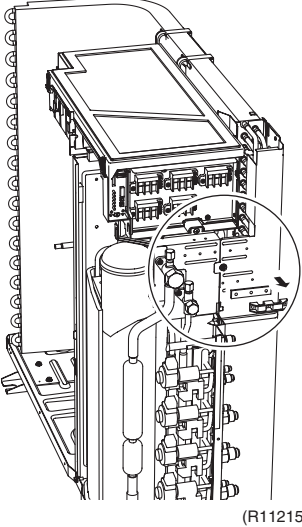
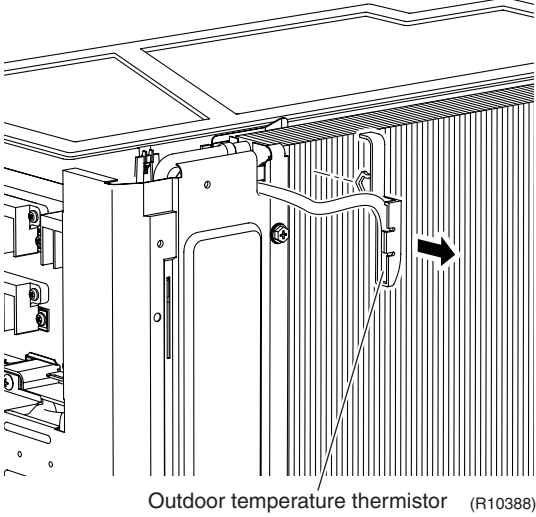
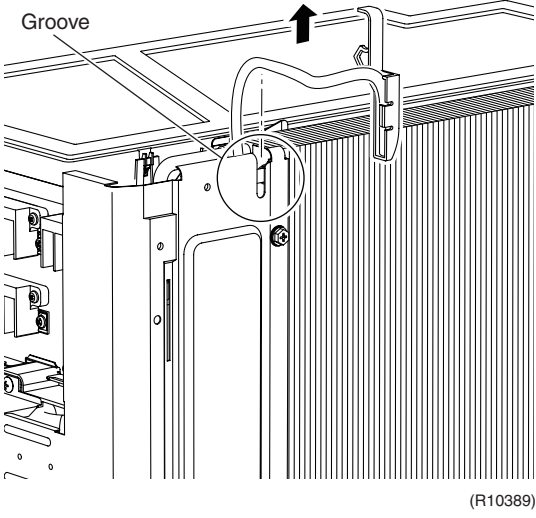


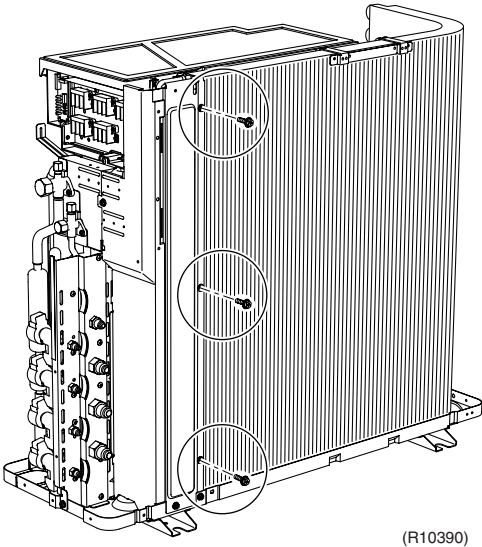
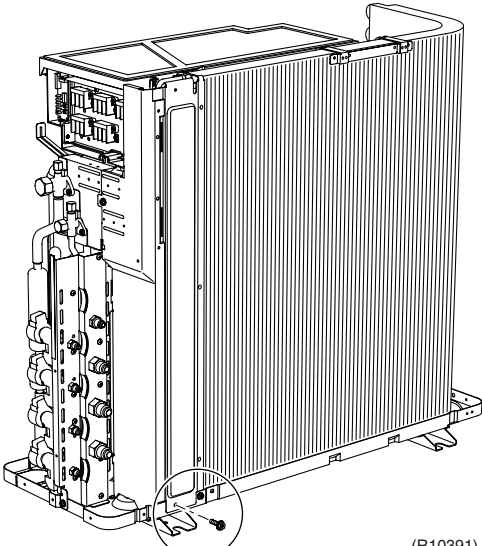
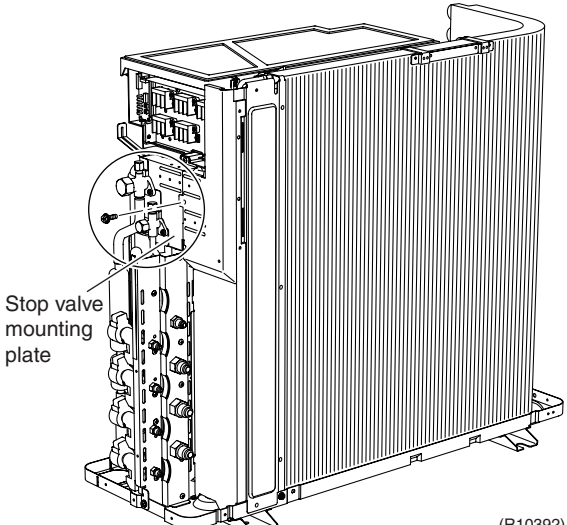
Step	Procedure	Points
9	Remove the screw at the bottom of the back side.	 <p>(R6394)</p>
10	The front panel (1) has a hook. Lift the front panel (1).	 <p>(R17174)</p>
11	Remove the front panel (1).	 <p>(R10385) (R6396)</p> <ul style="list-style-type: none"> ■ Be sure to detach the front panel (1) carefully so as not to deform it.

Step	Procedure	Points
<p>6. Remove the rear panel.</p>	<p>1 Remove the screw on the partition plate (2).</p>  <p>(R11209)</p> <p>2 Slide the partition plate (2) to the left and remove it.</p>  <p>(R11211)</p>	<p>U.S. models</p> <ul style="list-style-type: none"> ■ The U.S. models have 2 screws.  <p>(R10386)</p> <p>U.S. models</p> <ul style="list-style-type: none"> ■ When reassembling, bundle the wires with clamp. ■ When reassembling, pass the wires through the partition plate (2).  <p>(R17353)</p>

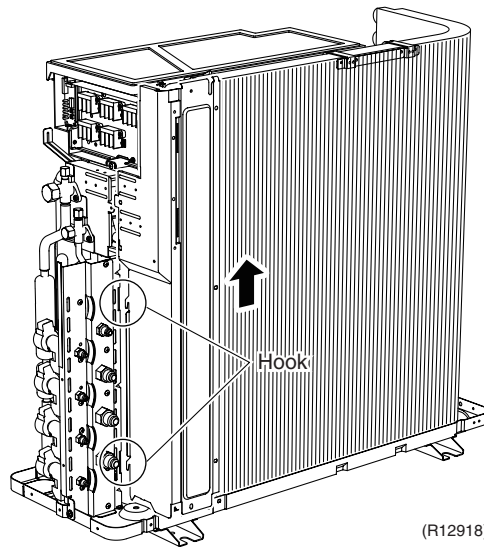
Step	Procedure	Points
3	Remove the 5 screws on the wire fixing plate (upper).	<ul style="list-style-type: none"> ■ The U.S. models have no wire fixing plates (upper and lower).
4	Remove the wire fixing plate (upper).	
5	Remove the 3 screws on the wire fixing plate (lower).	



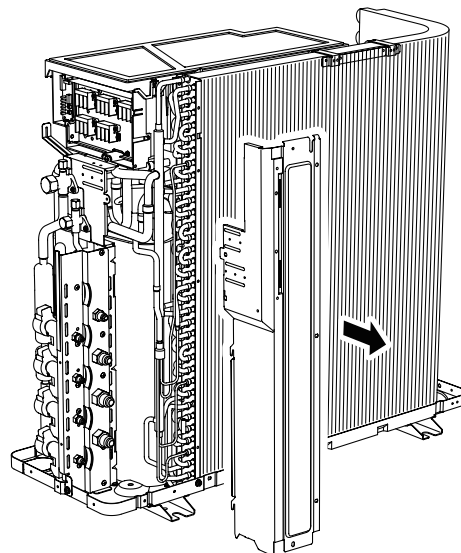
Step	Procedure	Points
6	Remove the wire fixing plate (lower).	
	 <p style="text-align: center;">(R11215)</p>	
7	Pull out the holder of the outdoor temperature thermistor.	<ul style="list-style-type: none"> ■ The holder is secured in the clearances of the outdoor heat exchanger fins.
	 <p style="text-align: center;">Outdoor temperature thermistor (R10388)</p>	
8	Release the thermistor wire from the groove	
	 <p style="text-align: center;">(R10389)</p>	

Step	Procedure	Points
9	Remove the 3 screws on the rear panel.	
	 <p>(R10390)</p>	
10	Remove the screw on the bottom frame.	
	 <p>(R10391)</p>	
11	Remove the screw on the stop valve mounting plate.	
	 <p>Stop valve mounting plate</p> <p>(R10392)</p>	

Step	Procedure	Points
12	Lift the rear panel upward to unfasten the 2 hooks.	
13	Remove the rear panel.	



(R12918)



(R10394)

2. Removal of Electrical Box

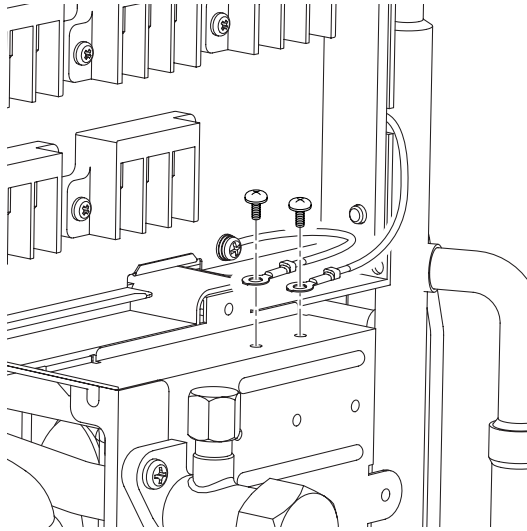
Procedure



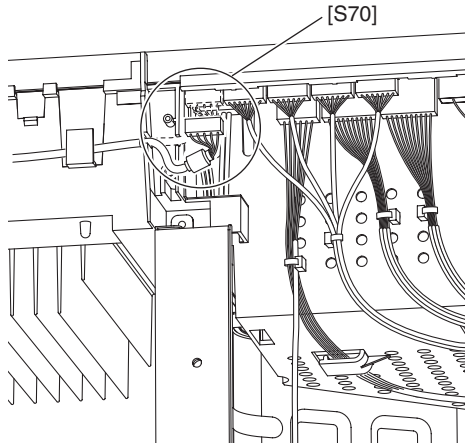
Warning

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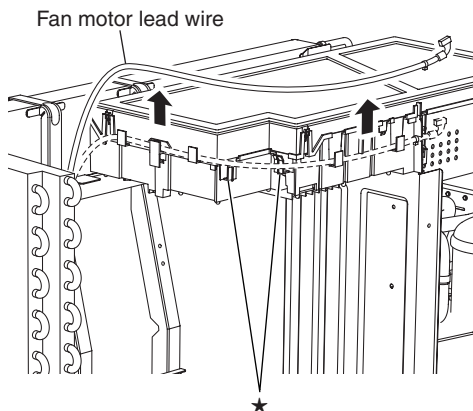
Step	Procedure	Points
1	Remove the 2 screws to detach the earth/ground wires.	
2	Disconnect the connector for the fan motor [S70].	
3	Release the fan motor lead wire.	★: When reassembling, do not use these 2 hooks.



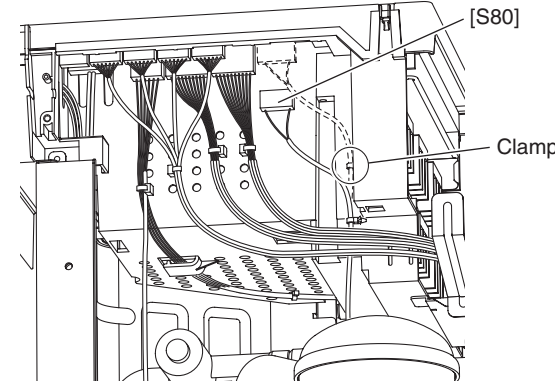
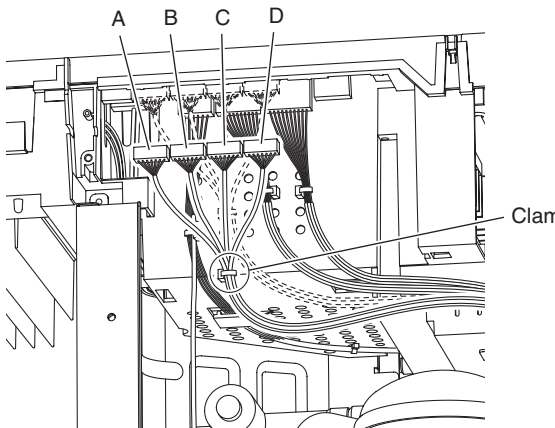
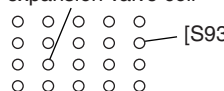
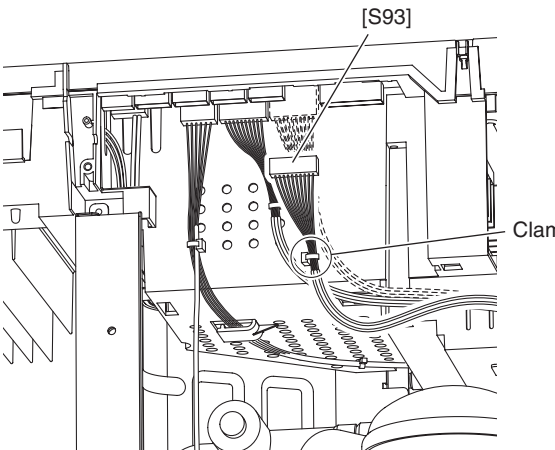
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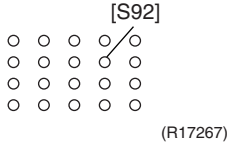
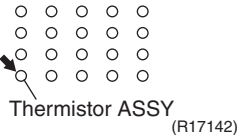
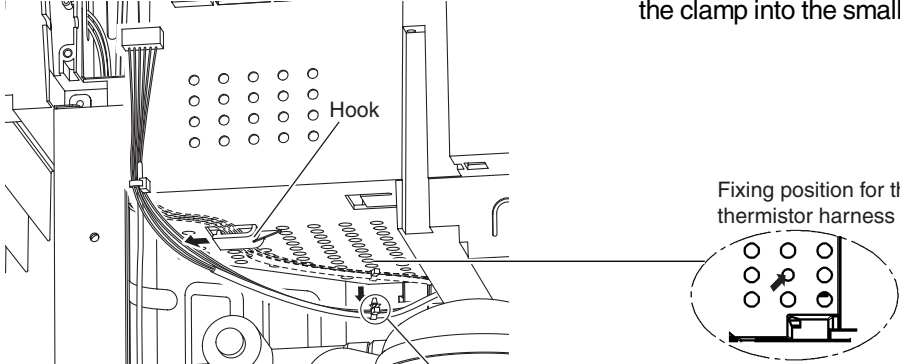


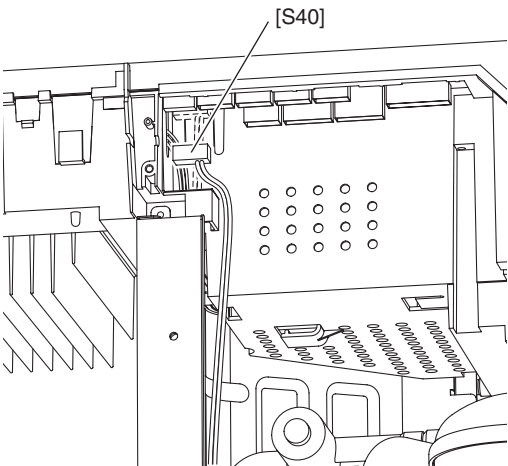
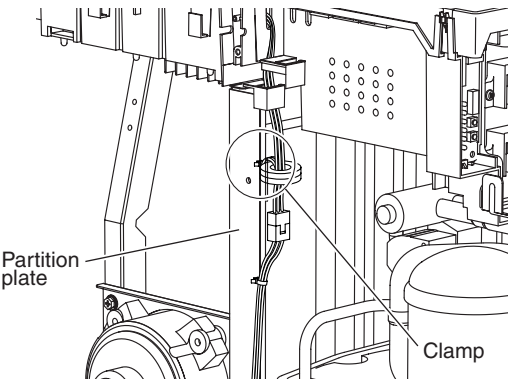
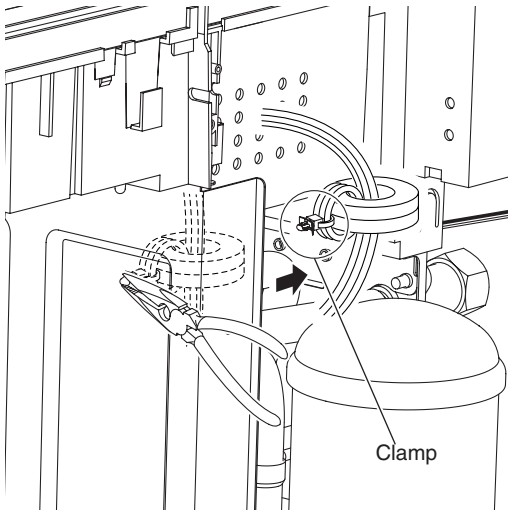
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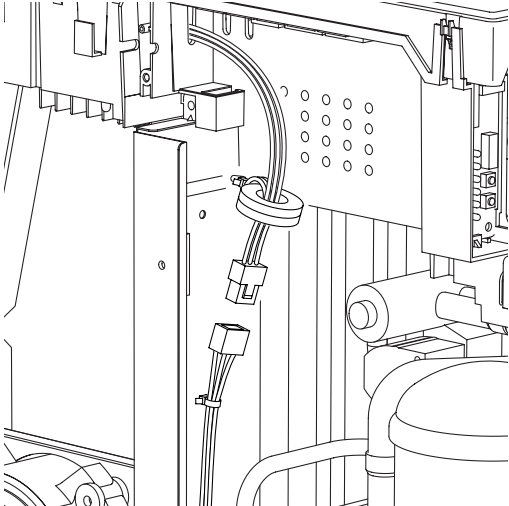
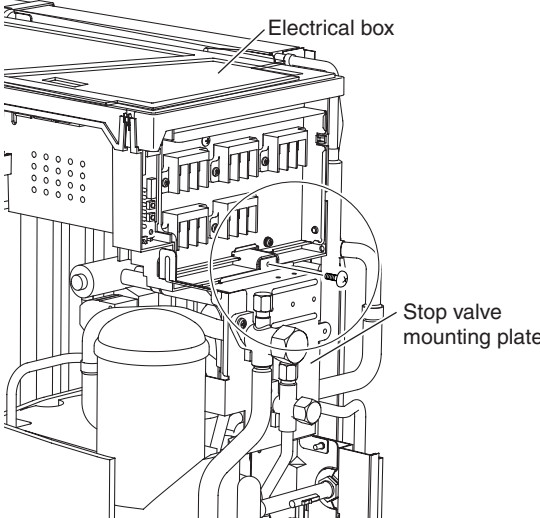
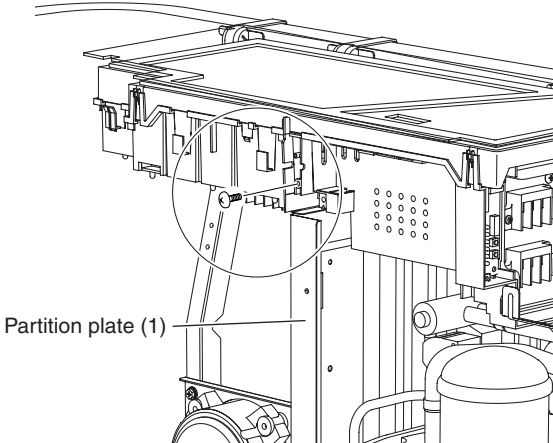


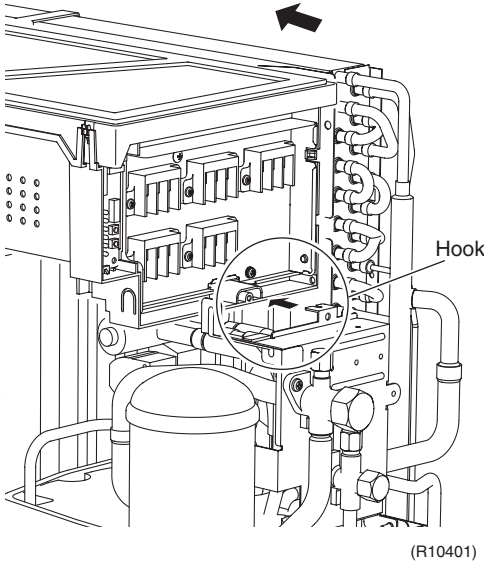
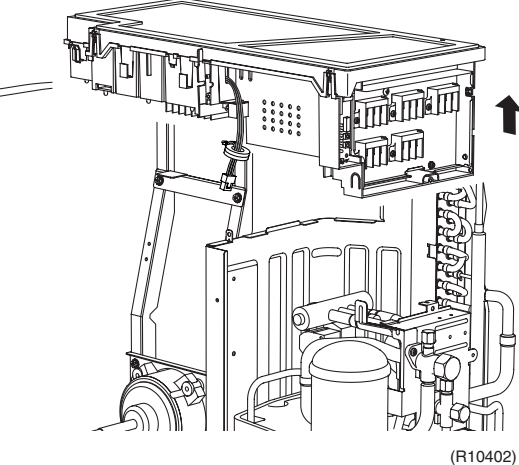
(R17268)

Step	Procedure	Points
4	<p>Disconnect the connector for the four way valve coil [S80].</p>  <p style="text-align: right;">(R11187)</p>	<ul style="list-style-type: none"> ■ Pull out the clamp.
5	<p>Disconnect the connectors for the electronic expansion valve coil.</p> <p>[S20] (white): room A [S21] (red): room B [S22] (blue): room C [S23] (yellow): room D</p>  <p style="text-align: right;">(R11188)</p>	<ul style="list-style-type: none"> ■ Pull out the clamp. ■ The 2-room models have no harness for [S22] and [S23]. ■ The 3-room models have no harness for [S23]. ■ The 5-room models have [S24] (green) for room E. ■ When reassembling, insert each clamp into the small hole. <p>For the electronic expansion valve coil</p>  <p style="text-align: right;">(R17266)</p>
6	<p>Disconnect the connector for the liquid pipe thermistor [S93].</p>  <p style="text-align: right;">(R10400)</p>	<ul style="list-style-type: none"> ■ Pull out the clamp.

Step	Procedure	Points
7	Disconnect the connector for the gas pipe thermistor [S92].	<ul style="list-style-type: none"> ■ Pull out the clamp. ■ When reassembling, insert the clamp into the small hole. 
8	Disconnect the connector for the thermistors [S90].	<ul style="list-style-type: none"> ■ Pull out the clamp. ■ When reassembling, insert the clamp of the thermistor ASSY into the hole as below. 
9	The wire harness of the thermistor is hooked under the electrical box. Unhook it and pull out the clamp.	<ul style="list-style-type: none"> ■ When reassembling, insert the clamp into the small hole. 

Step	Procedure	Points
10	Disconnect the connector for the overload protector [S40].	 <p data-bbox="975 725 1038 741">(R10539)</p>
11	The wire harness for the compressor is attached to the partition plate (1) by the clamp.	 <p data-bbox="975 1178 1038 1193">(R12904)</p>
12	Pull out the clamp with pliers.	 <p data-bbox="975 1749 1038 1765">(R6423)</p>

Step	Procedure	Points
13	Disconnect the relay connector of the compressor.	
	 <p>(R6469)</p>	
14	Remove the screw on the stop valve mounting plate.	
	 <p>(R10395)</p>	
15	Remove the screw on the partition plate (1).	
	 <p>(R6411)</p>	

Step	Procedure	Points
16	Slide the electrical box leftward to unfasten the hook on the right side of the electrical box.	
 <p>(R10401)</p>		
17	Lift up the electrical box and remove it.	
 <p>(R10402)</p>		

3. Removal of PCBs

Procedure

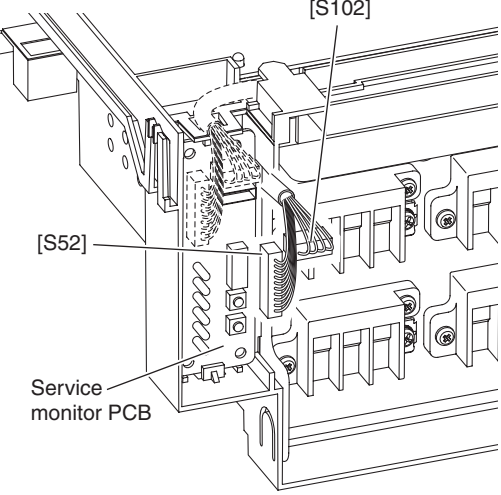
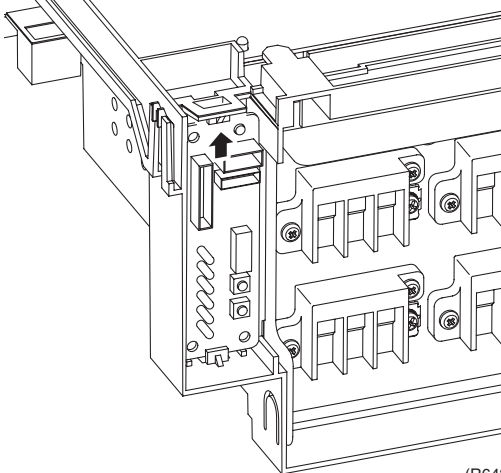
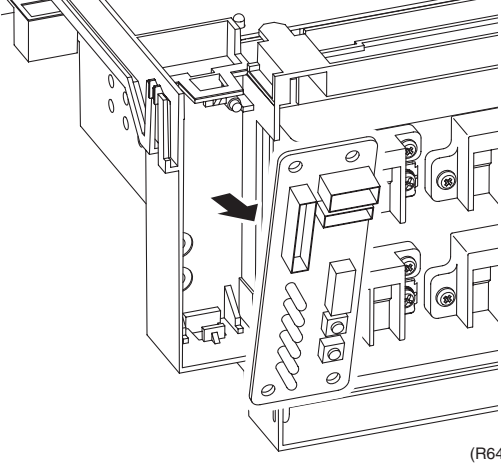


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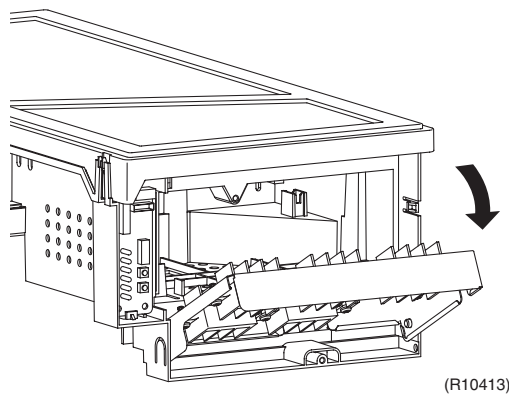
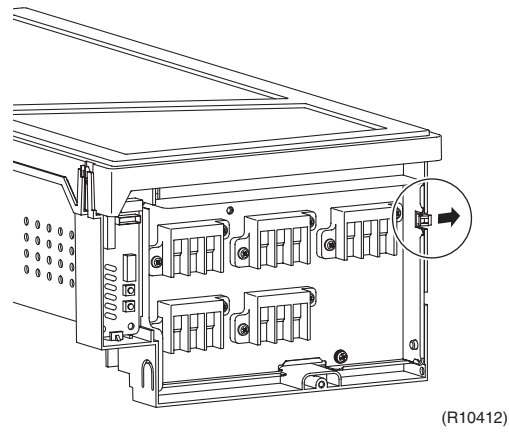
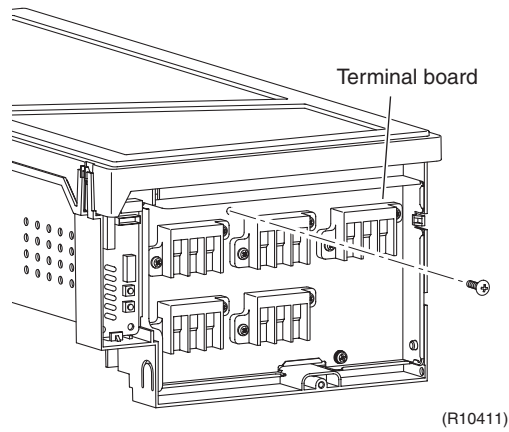
Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1. Remove the main PCB.		
1 Remove the cover of the electrical box.	<p>(R14617)</p>	<p>■ Release the 4 hooks. The hooks are marked with ▼.</p> <p>(R6427)</p>
2 Remove the 3 screws.	<p>(R10404)</p>	
3 Unfasten the 4 hooks.	<p>(R10405)</p>	
4 Lift up the main PCB.	<p>(R10406)</p>	

Step		Procedure	Points
5	Disconnect the connectors.	<p>(R10407)</p>	<p>[S51] [S101] : service monitor PCB [S10] : terminal board (transmission) [HR1] [HR2] : reactor [AC1] [AC2] : terminal board (power supply) [U] [V] [W] : compressor</p>
6	Remove the main PCB.	<p>(R10408)</p>	
2. Remove the reactor.			
1	Remove the screw.	<p>(R10409)</p>	
2	Remove the 3 screws and lift the reactor upward to remove it.	<p>(R6434)</p>	

Step	Procedure	Points
3.	Remove the service monitor PCB.	
1	<p>Disconnect the connectors [S52] [S102] from the service monitor PCB.</p>  <p>(R10410)</p>	
2	<p>Slightly lift the top hook to detach.</p>  <p>(R6436)</p>	
3	<p>Unfasten the bottom hook and remove the service monitor PCB.</p>  <p>(R6437)</p>	

Step	Procedure	Points
4. Remove the terminal board.		
1	Remove the screw.	
2	Unfasten the hook.	
3	Remove the terminal board.	



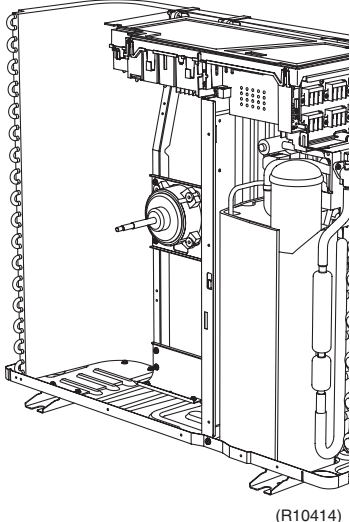
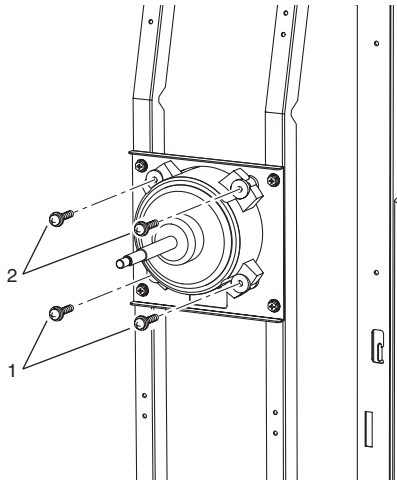
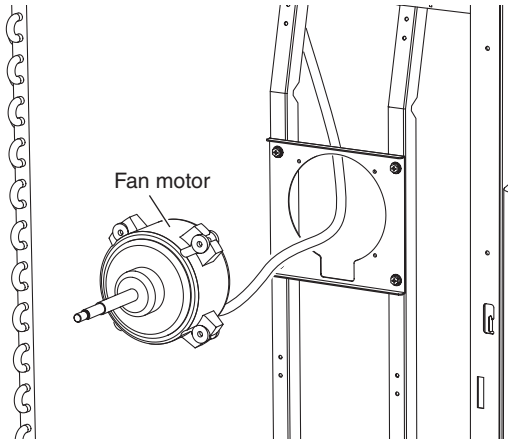
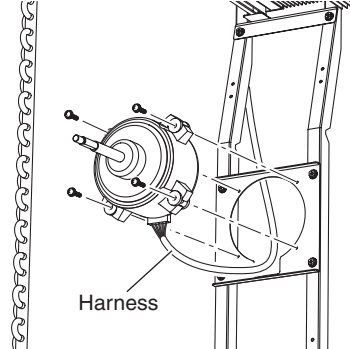
4. Removal of Fan Motor

Procedure



Warning

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

Step	Procedure	Procedure	Points
<p>1 Remove the 2 lower screws of the fan motor.</p> <p>2 Remove the 2 upper screws.</p>	 <p>(R10414)</p>	 <p>(R6442)</p>	<ul style="list-style-type: none"> ■ Be sure to remove the lower screws first. If the upper screws are removed first, the fan motor may tilt or fall because the center of its gravity is toward the front. It may cause injuries.
<p>3 Remove the fan motor.</p>	 <p>(R10542)</p>	 <p>(R6444)</p>	<ul style="list-style-type: none"> ■ When reassembling, be sure to place the wire harness lower.

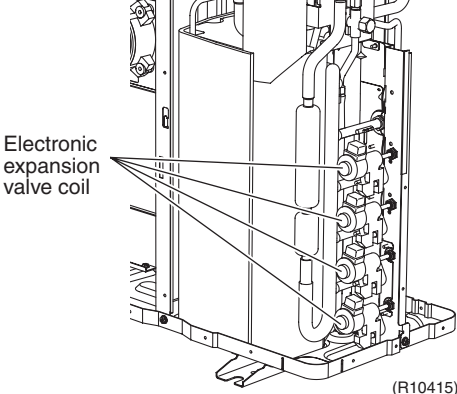
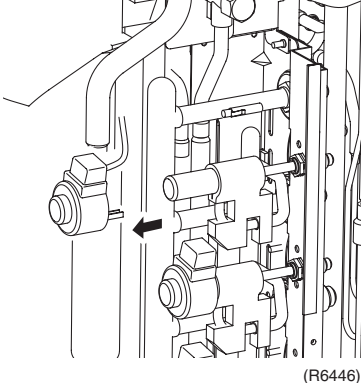
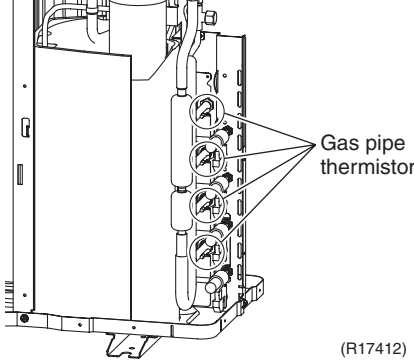
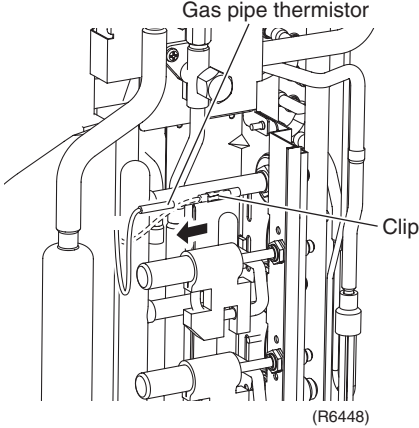
5. Removal of Coils / Thermistors

Procedure

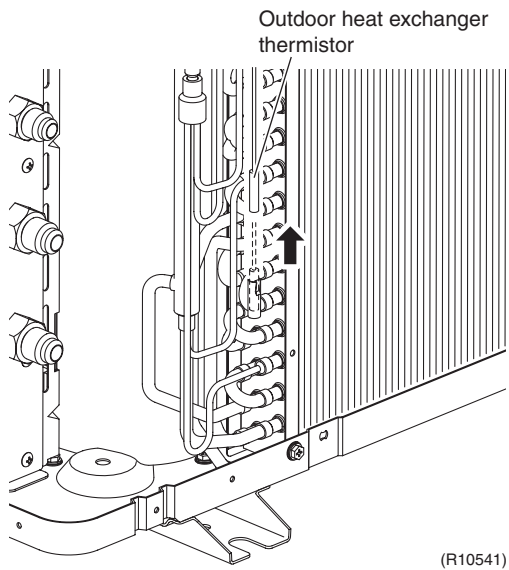
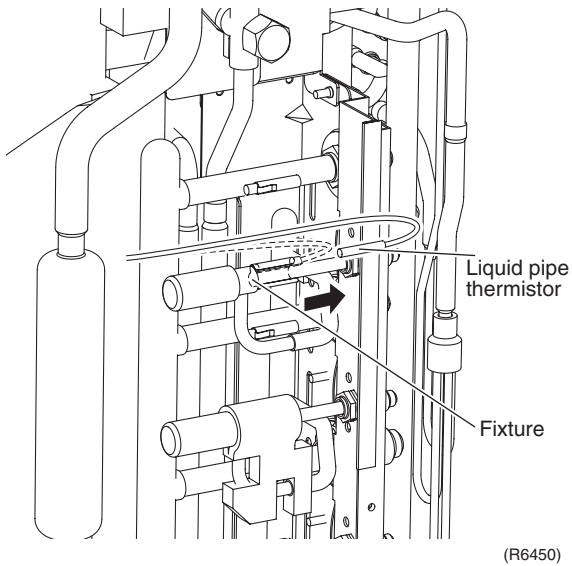
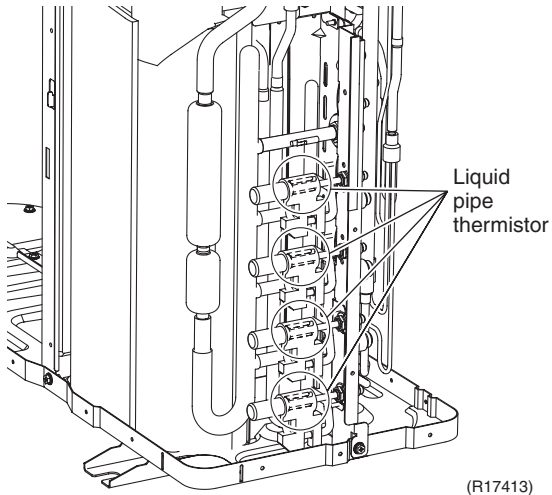


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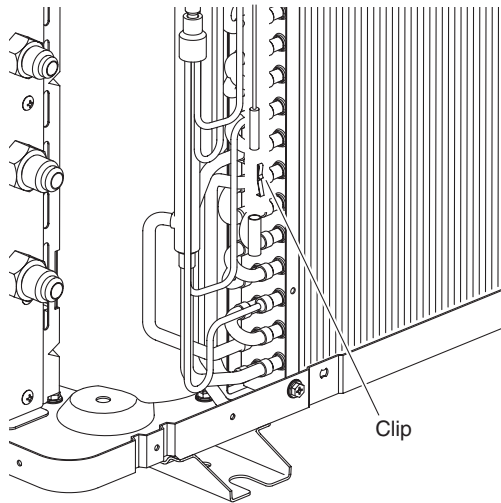
Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1. Remove the electronic expansion valve coils. 1 Pull out the electronic expansion valve coils.	 <p>Electronic expansion valve coil</p> <p>(R10415)</p>  <p>(R6446)</p>	
2. Remove the thermistors. 1 Pull out the gas pipe thermistors.	 <p>Gas pipe thermistor</p> <p>(R17412)</p>  <p>Gas pipe thermistor</p> <p>Clip</p> <p>(R6448)</p>	<ul style="list-style-type: none"> ■ Place the thermistor so that its edge comes up to the edge of the fixture. ■ Be careful not to lose the clips for the thermistors.

Step	Procedure	Points
2	Peel off the putty and pull out the liquid pipe thermistors.	<ul style="list-style-type: none"> ■ Be careful not to lose the fixtures for the thermistors.
3	Pull out the outdoor heat exchanger thermistor.	

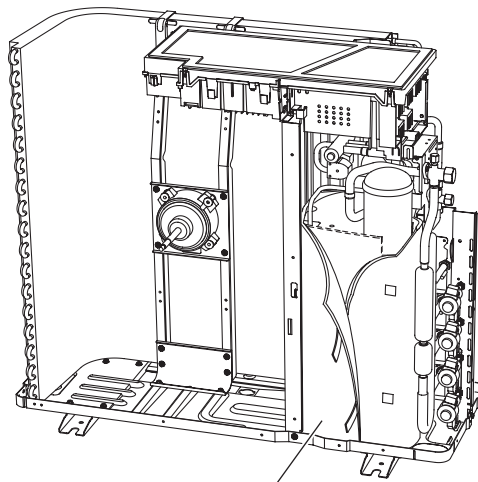


Step	Procedure	Points
4	Remove the clip from the outdoor heat exchanger thermistor.	<ul style="list-style-type: none"> ■ Be careful not to lose the clip.
5	Slightly open the sound blanket (outer).	
6	Remove the sound blanket (top upper).	

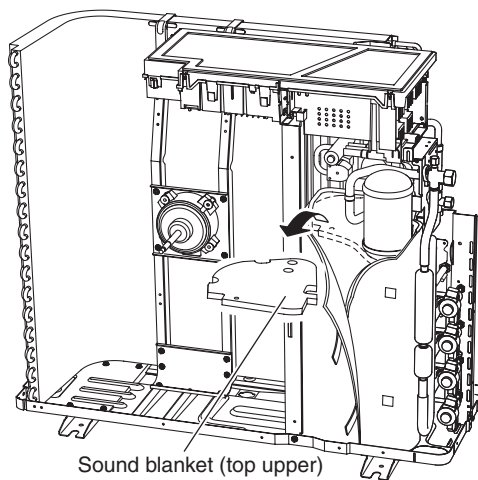


Clip

(R6452)

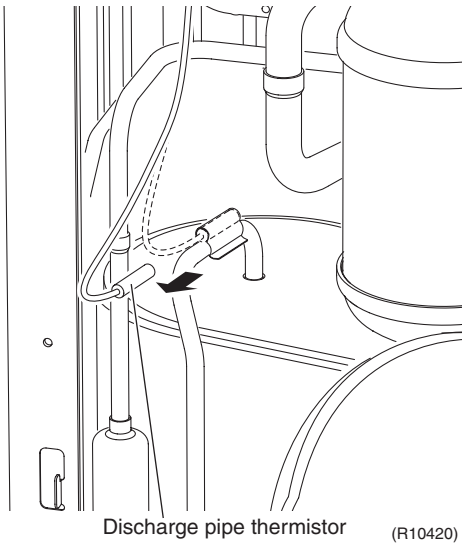
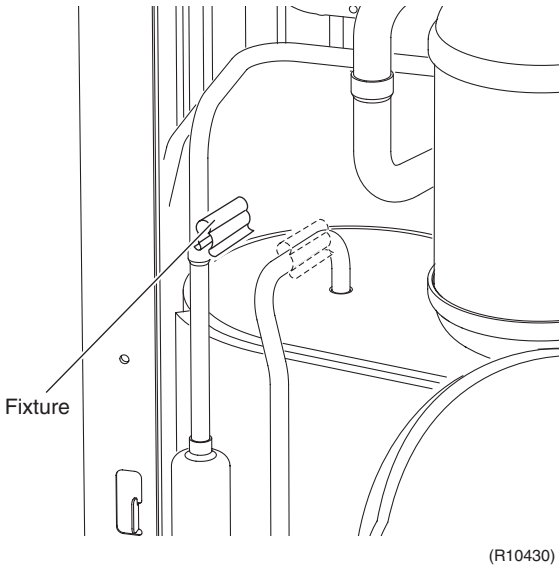
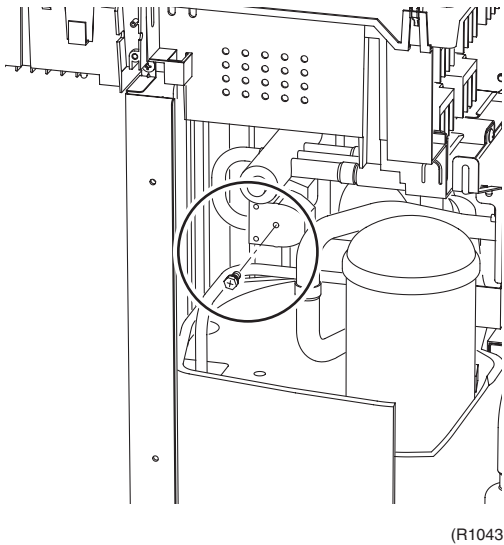


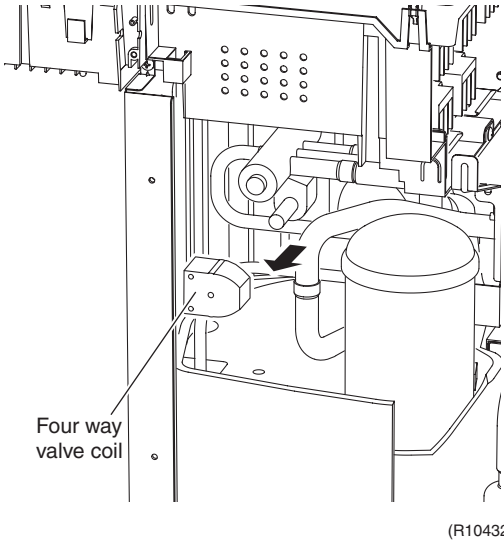
Sound blanket (outer) (R10418)



Sound blanket (top upper)

(R10419)

Step	Procedure	Points
7	<p>Remove the discharge pipe thermistor.</p>  <p>Discharge pipe thermistor (R10420)</p>	
8	<p>Remove the fixture.</p>  <p>Fixture (R10430)</p>	
3.	<p>Remove the four way valve coil.</p>	
1	<p>Remove the screw.</p>  <p>(R10431)</p>	

Step	Procedure	Procedure	Points
2	Remove the four way valve coil.	 <p>The diagram shows a technical drawing of a four-way valve coil assembly. A label 'Four way valve coil' with a leader line points to a rectangular component on the left side of the assembly. The assembly includes various pipes, a cylindrical tank, and a control panel with several indicator lights. The reference code '(R10432)' is located at the bottom right of the drawing.</p>	

6. Removal of Sound Blankets

Procedure

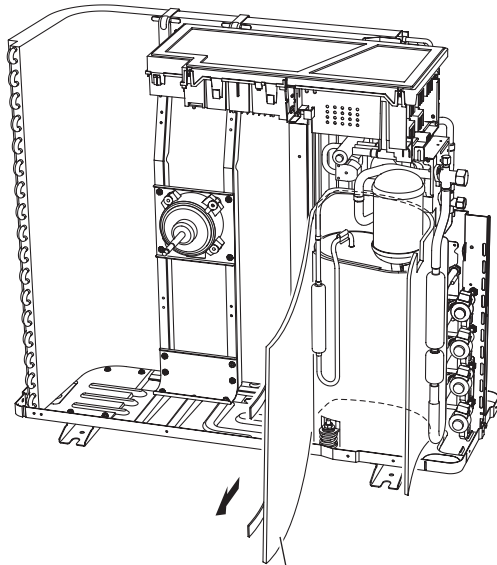


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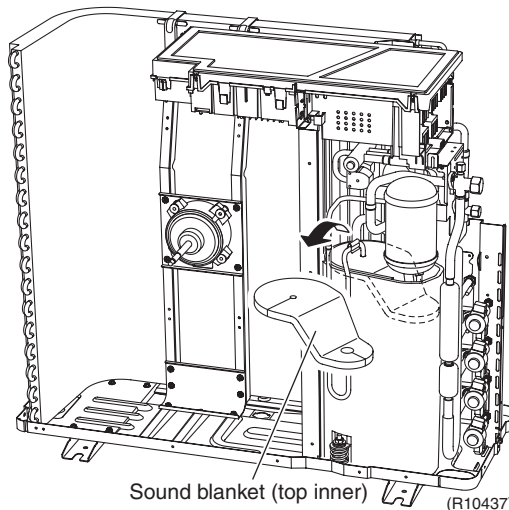
Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1	Open the sound blanket (outer).	
	<p style="text-align: center;">Sound blanket (outer) (R10433)</p>	
2	Remove the sound blanket (top upper).	<ul style="list-style-type: none"> ■ The sound blanket is fragile. Carefully pass the blanket through the discharge pipe.
	<p style="text-align: center;">Sound blanket (top upper) (R10434)</p>	
3	Remove the screw from the partition plate (1) and push the plate to the left slightly for easy work.	
	<p style="text-align: center;">Partition plate (1) (R10435)</p>	

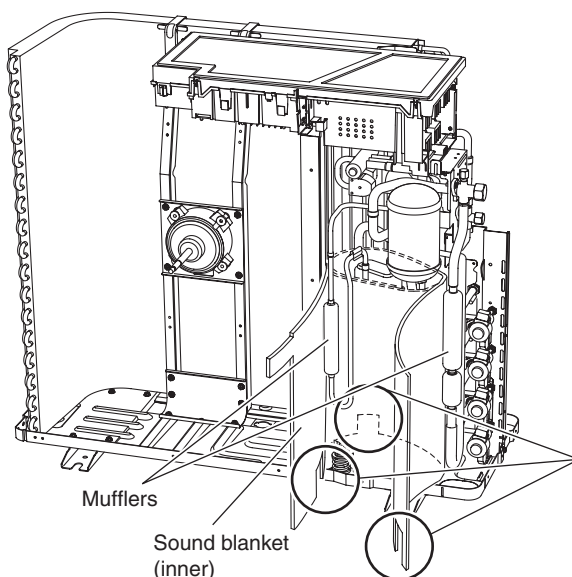
Step	Procedure	Points
4	Remove the sound blanket (outer).	<ul style="list-style-type: none"> ■ The sound blanket is fragile. Carefully pass the blanket through the discharge pipe.
5	Remove the sound blanket (top inner).	
6	Open the sound blanket (inner) and pass it through the part of the mufflers.	<ul style="list-style-type: none"> ■ The sound blanket is fragile. Be careful of the notches of the compressor mount (3 locations).



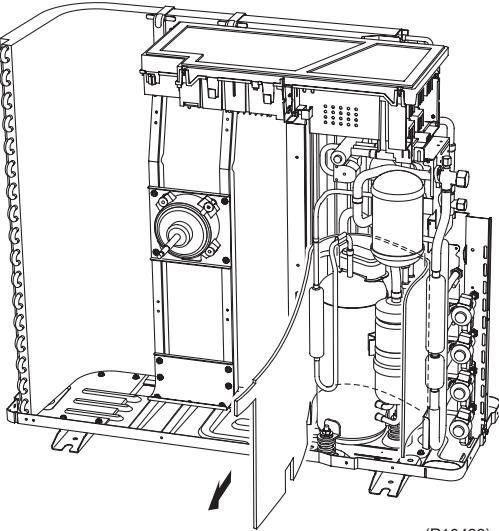
Sound blanket (outer) (R10436)



Sound blanket (top inner) (R10437)



Mufflers
Sound blanket (inner) (R10438)

Step	Procedure	Points
7	<p data-bbox="201 219 416 277">Remove the sound blanket (inner).</p>  <p data-bbox="959 763 1023 786">(R10439)</p>	

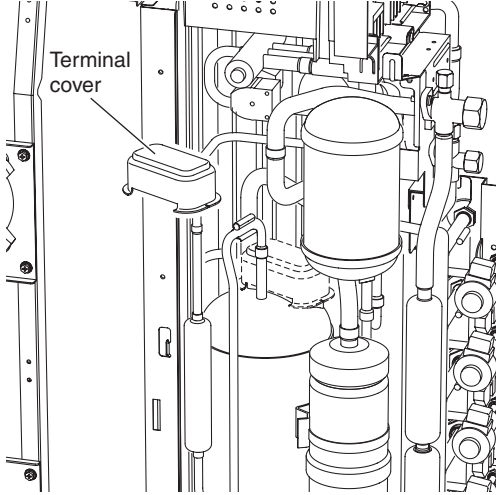
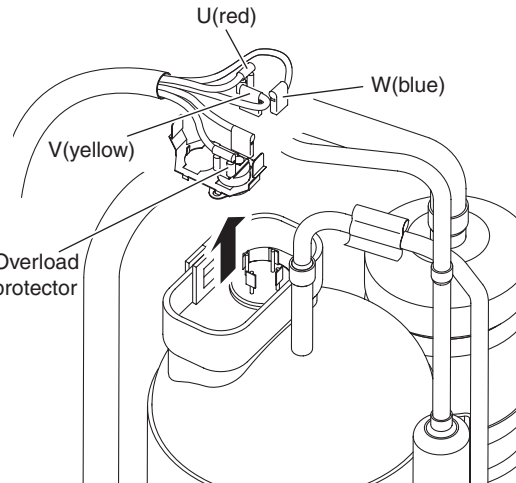
7. Removal of Compressor

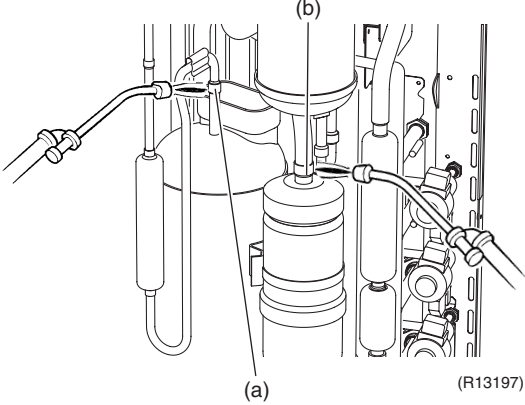
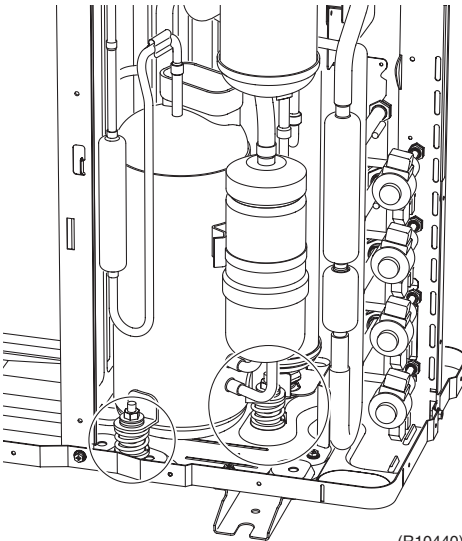
Procedure



Warning

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

Step	Procedure	Procedure	Points
1	Remove the terminal cover.	 <p>Terminal cover</p> <p>(R6466)</p>	
2	Disconnect the compressor lead wires.	 <p>U(red)</p> <p>W(blue)</p> <p>V(yellow)</p> <p>Overload protector</p> <p>(R9471)</p>	<p>■ U : red, V : yellow, W : blue</p>
3	Remove the overload protector.		

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;">(R13197)</p>	<p>Warning Be careful not to get yourself burnt with the pipes and other parts that are heated by the gas brazing machine.</p> <p>Warning If the refrigerant gas leaks during work, ventilate the room. (If the refrigerant gas is exposed to flames, toxic gas may be generated.)</p> <p>Warning Since it may happen that the refrigerant oil in the compressor catches fire, prepare wet cloth so as to extinguish fire immediately.</p> <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 style="text-align: right;">(R10440)</p>
<ol style="list-style-type: none"> 6 Remove the 3 nuts. 7 Lift the compressor up to remove it. 		

Revision History

Month / Year	Version	Revised contents
01 / 2013	Si121094	First edition

Warning



- Daikin products are manufactured for export to numerous countries throughout the world. Prior to purchase, please confirm with your local authorised importer, distributor and/or retailer whether this product conforms to the applicable standards, and is suitable for use, in the region where the product will be used. This statement does not purport to exclude, restrict or modify the application of any local legislation.
- Ask a qualified installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Use only those parts and accessories supplied or specified by Daikin. Ask a qualified installer or contractor to install those parts and accessories. Use of unauthorised parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Read the User's Manual carefully before using this product. The User's Manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

If you have any enquiries, please contact your local importer, distributor and/or retailer.

Cautions on product corrosion

1. Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced.
2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided. If you need to install the outdoor unit close to the sea shore, contact your local distributor.

Dealer

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