




REMOVAL PROCEDURE



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

8.0/9.0/10.0 kW Class

-  Outdoor Unit
-  Inverter
-  Multi Type



Service Manual Removal Procedure

Outdoor Unit

●Cooling Only

4MKS80ESG

4MKS80FSG

**4MKS80KVM
4MKS100KVM**

**4MKS80LVMA
4MKS80LVMA9**

●Heat Pump

**4MXS80KVM
4MXS100KVM**

**4MXS80LVMA
4MXS80LVMA9**

**4MXS80E3V3B
5MXS90E3V3B**

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Note:

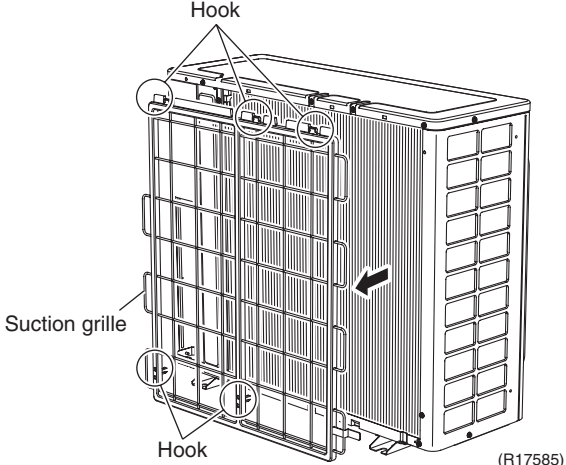
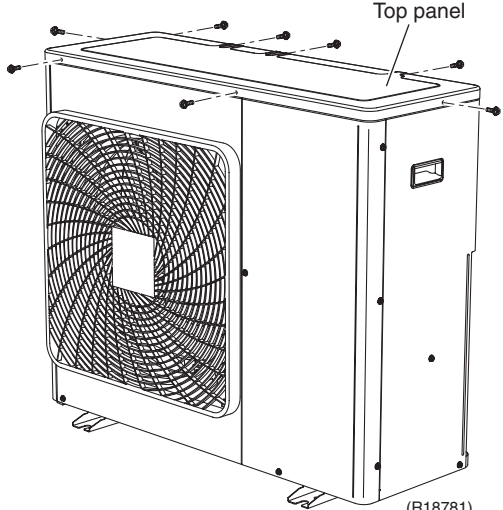
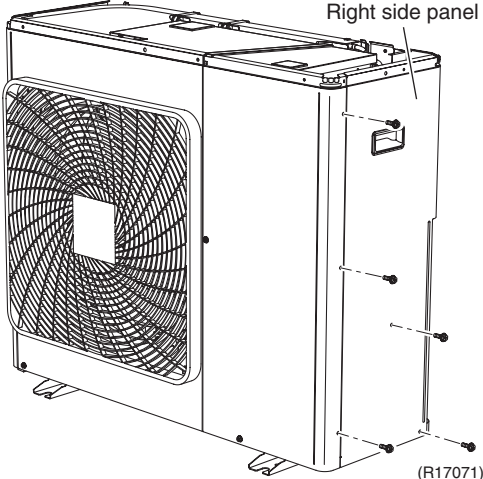
- The illustrations may be slightly different depending on the model.
- The illustrations are for heat pump models as representative.

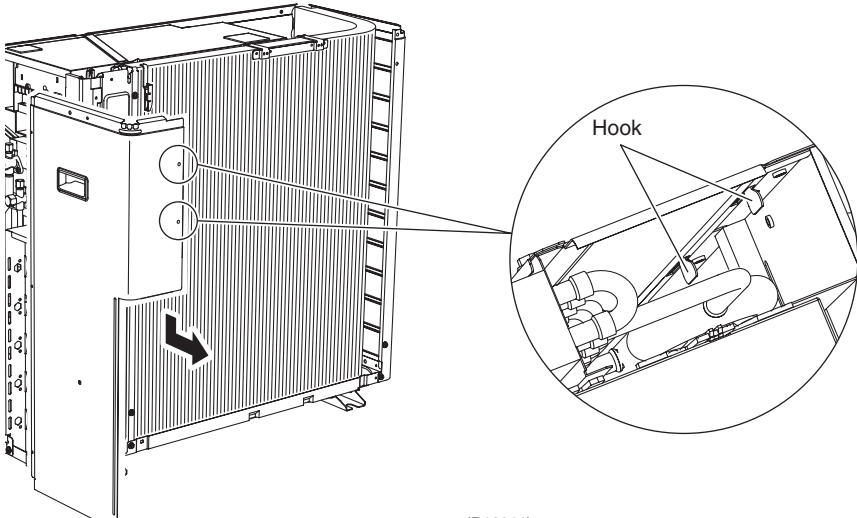
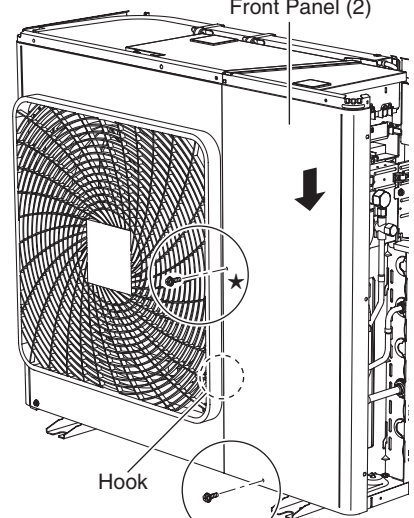
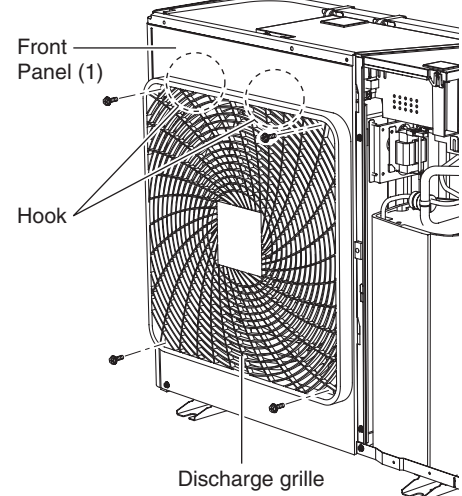
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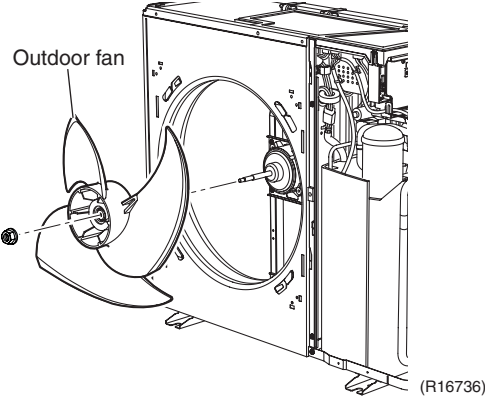
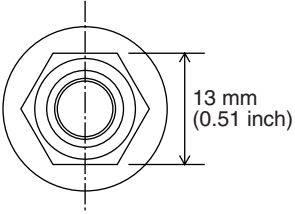
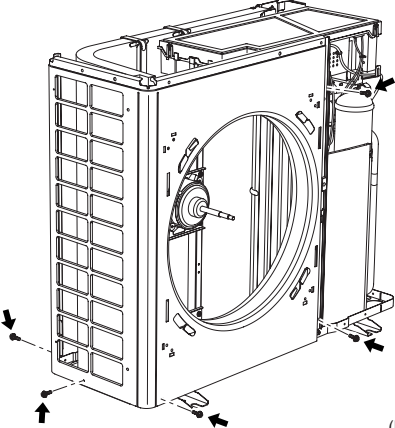
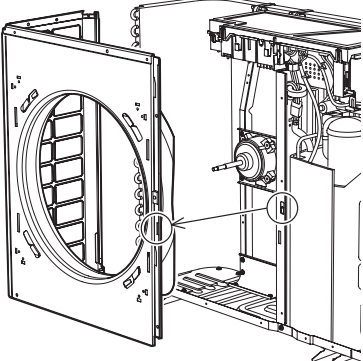
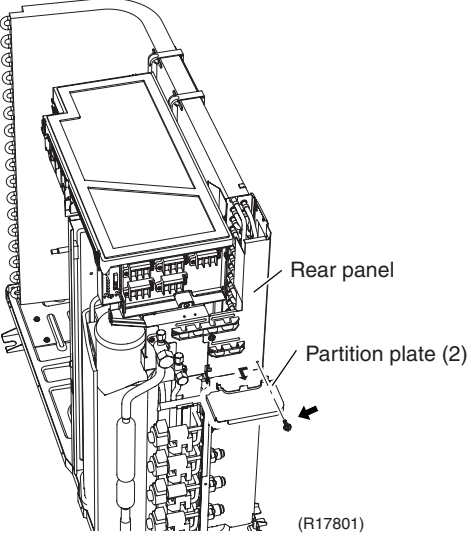
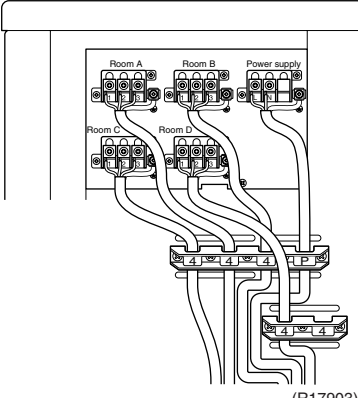


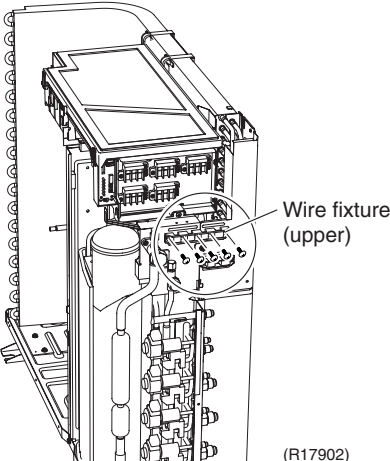
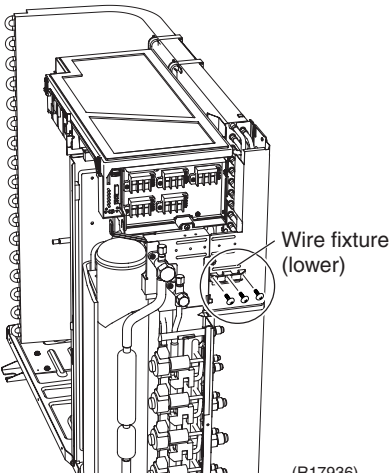
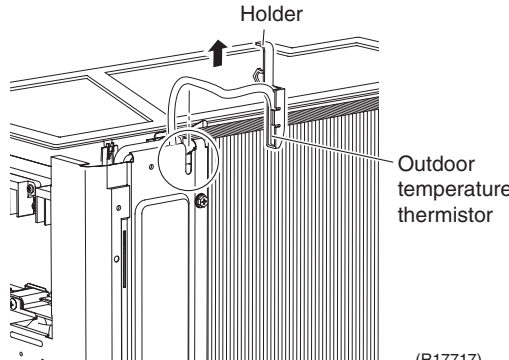
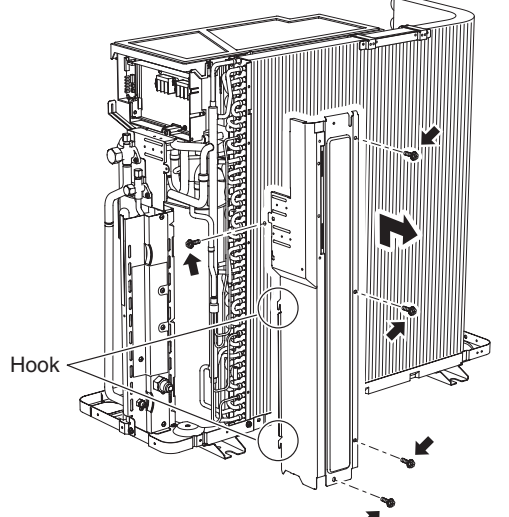
Warning

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

Step	Procedure	Points
<p>1. Remove the suction grille.</p> <p>1 Unfasten the 5 hooks.</p> <p>2 Remove the suction grille.</p>		
<p>2. Remove the top panel.</p> <p>1 Remove the 8 screws.</p> <p>2 Lift the top panel and remove it.</p>		
<p>3. Remove the right side panel.</p> <p>1 Remove the 5 screws.</p>		

Step	Procedure	Procedure	Points
2	Remove the right side panel.	 <p>(R18911)</p>	<ul style="list-style-type: none"> ■ Slide the right side panel downward to unfasten the 2 hooks on the rear side.
4.	Remove the front panel (2).	 <p>(R18782)</p>	<ul style="list-style-type: none"> ★: This screw is M5(3) × 16 ■ Slide the front panel (2) downward to unfasten the hook.
5.	Remove the front panel (1).	 <p>(R18784)</p>	<ul style="list-style-type: none"> ■ Remove the discharge grille and the outdoor fan before removing the front panel (1).
1	Remove the 4 screws on the discharge grille.		
2	Unfasten the 2 hooks at the top and remove the discharge grille.		

Step	Procedure	Procedure	Points
3	Remove the nut and remove the outdoor fan.	 <p>(R16736)</p>	<p>■ Nut size : M8</p>  <p>(R18965)</p> <p>■ When reassembling, align the ▼ mark of the outdoor fan with the D-cut section of the motor shaft.</p>
4	Remove the 5 screws.	 <p>(R18785)</p>	
5	Release the hook and remove the front panel (1).	 <p>(R17716)</p>	
6.	Remove the rear panel.	<p>1 Remove the screw on the partition plate (2).</p> <p>2 Slide the partition plate (2) to the left and remove it.</p>  <p>(R17801)</p>	<p>■ Disconnect the connecting wires and power supply wires.</p>  <p>(R17903)</p>

Step	Procedure	Points
3	Remove the 5 screws on the wire fixture (upper).	
4	Remove the wire fixture (upper).	 <p>Wire fixture (upper)</p> <p>(R17902)</p>
5	Remove the 3 screws on the wire fixture (lower).	
6	Remove the wire fixture (lower).	 <p>Wire fixture (lower)</p> <p>(R17936)</p>
7	Release the holder and harness of the outdoor temperature thermistor.	 <p>Holder</p> <p>Outdoor temperature thermistor</p> <p>(R17717)</p>
8	Remove the 5 screws.	
9	Unfasten the 2 hooks and remove the rear panel.	 <p>Hook</p> <p>(R17718)</p>

2. Electrical Box

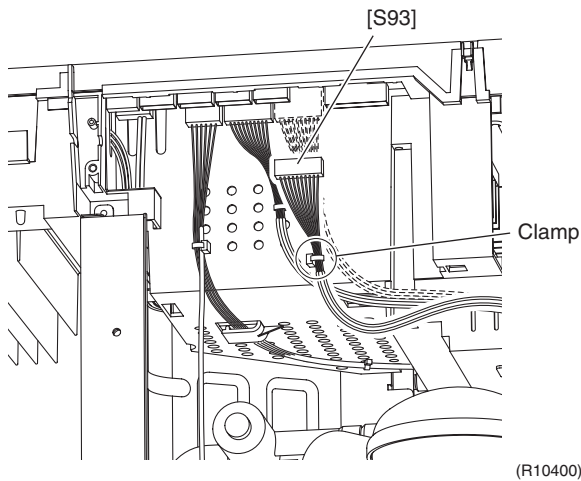
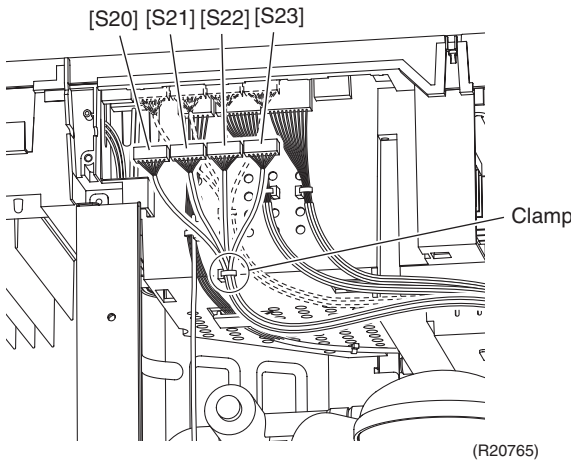
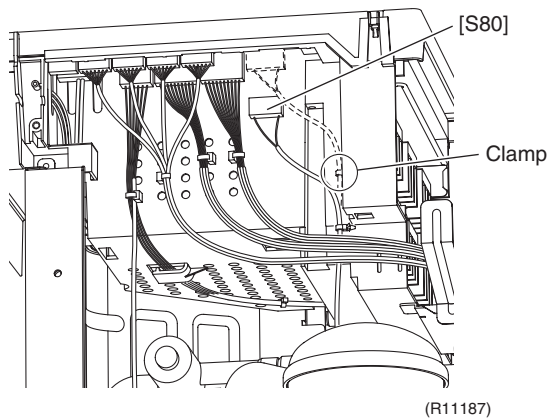


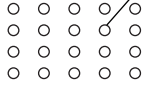

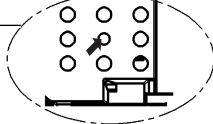
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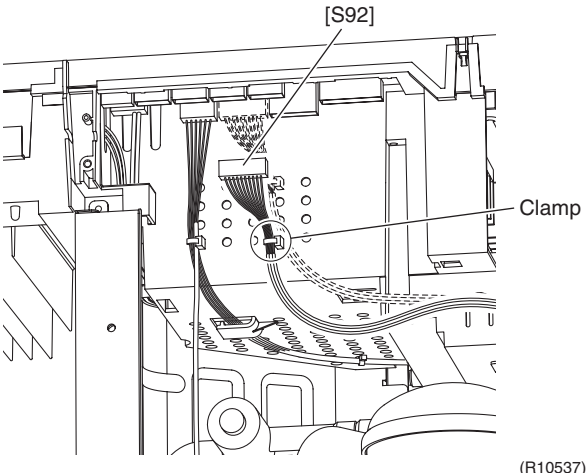
- ◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1	Remove the 2 screws to detach the earth / ground wires.	
	<p style="text-align: right;">Earth / ground wire</p> <p style="text-align: right;">(R20764)</p>	
2	Disconnect the connector [S70].	[S70]: fan motor
	<p style="text-align: center;">[S70]</p> <p style="text-align: right;">(R10397)</p>	
3	Release the fan motor lead wire from the 5 hooks.	★: When reassembling, do not use these 2 hooks.
	<p style="text-align: center;">Fan motor lead wire</p> <p style="text-align: center;">★</p> <p style="text-align: right;">(R17268)</p>	

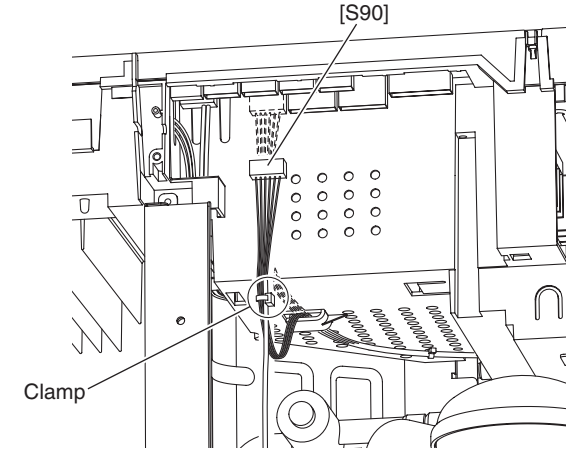
Step	Procedure	Points
4	Disconnect the connector [S80] and pull out the clamp.	<p>[S80]: four way valve coil</p> <ul style="list-style-type: none"> ■ The cooling only models have no harness for [S80].
5	Disconnect the 4 connectors for the electronic expansion valve coil and pull out the clamp.	<p>[S20] (white): room A [S21] (red): room B [S22] (blue): room C [S23] (yellow): room D</p> <ul style="list-style-type: none"> ■ 5-room models also have [S24] (green) for room E. ■ When reassembling, insert each clamp into the hole. <p>For the electronic expansion valve coil</p> <pre> ○ ○ / ○ ○ ○ ○ ○ / ○ ○ ○ ○ ○ / ○ ○ ○ ○ ○ / ○ ○ ○ </pre> <p>For [S93]</p> <p>(R17904)</p>
6	Disconnect the connector [S93] and pull out the clamp.	<p>[S93]: liquid pipe thermistor</p>



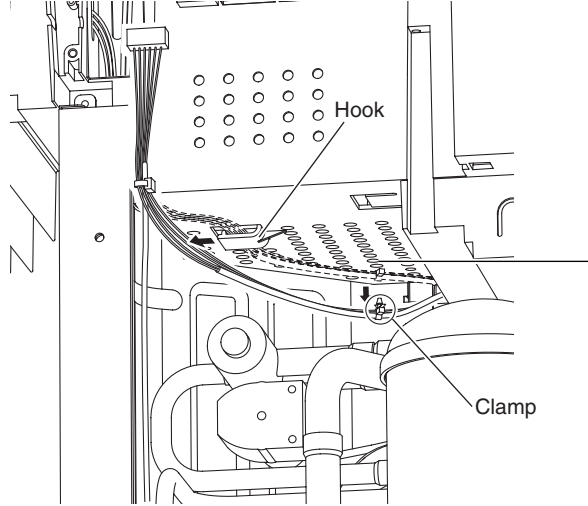
Step	Procedure	Points
7	Disconnect the connector [S92] and pull out the clamp.	<p>[S92]: gas pipe thermistor</p> <ul style="list-style-type: none"> When reassembling, insert the clamp into the hole. <p>For [S92]</p>  <p>(R17905)</p>
8	Disconnect the connector [S90] and pull out the clamp.	<p>[S90]: thermistor ASSY</p> <ul style="list-style-type: none"> When reassembling, insert the clamp into the hole.  <p>For thermistor ASSY (R17906)</p>
9	Release the thermistor harness from the hook at the bottom of electrical box.	<ul style="list-style-type: none"> When reassembling, insert the clamp into the hole.
10	Pull out the clamp of the thermistor harness from the hole of the electrical box.	<p>Fixing position for the thermistor harness</p> 



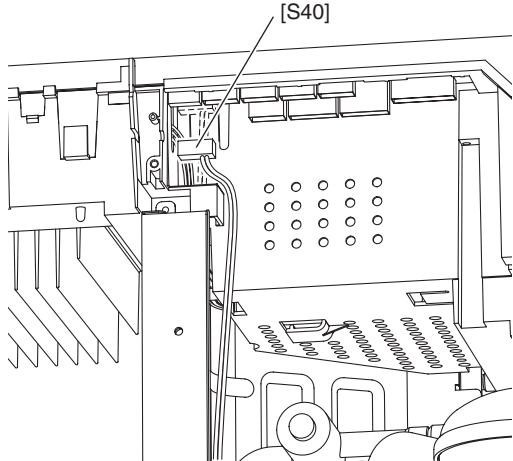
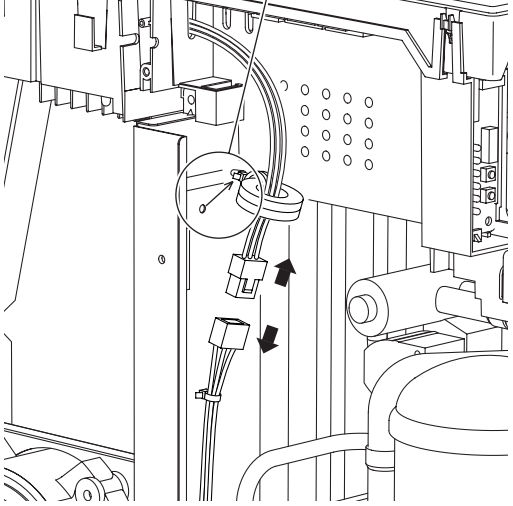
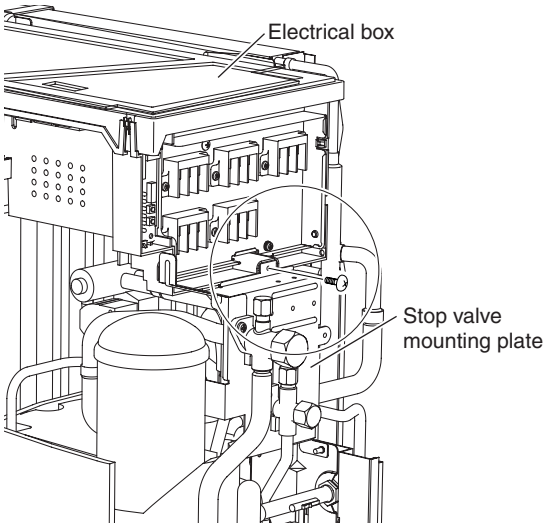
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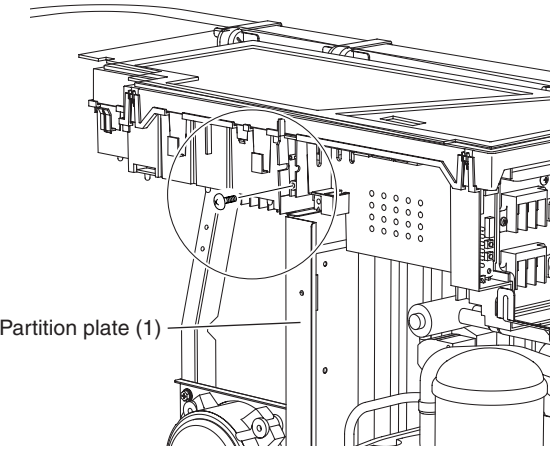
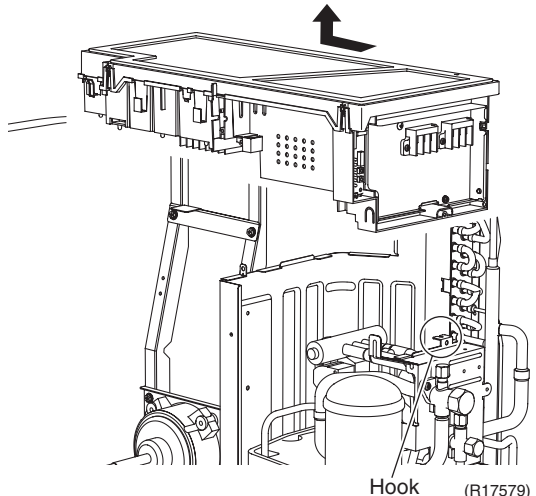


(R10538)



(R6420)

Step	Procedure	Points
11	Disconnect the connector [S40].	 <p>[S40]</p> <p>(R10539)</p>
12	Release the clamp.	
13	Disconnect the relay connector for the compressor.	 <p>Clamp</p> <p>(R20766)</p>
14	Remove the screw on the stop valve mounting plate.	 <p>Electrical box</p> <p>Stop valve mounting plate</p> <p>(R10395)</p>

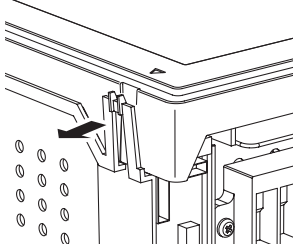
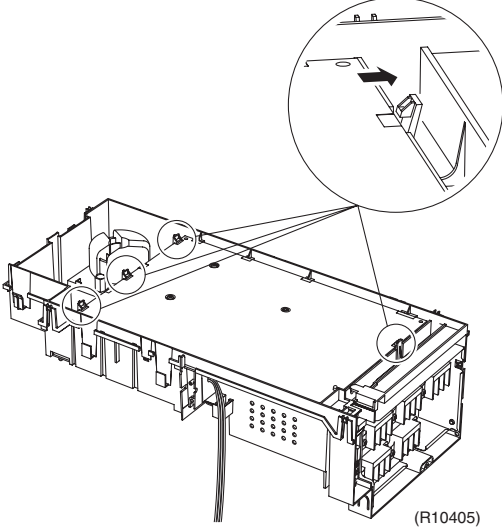
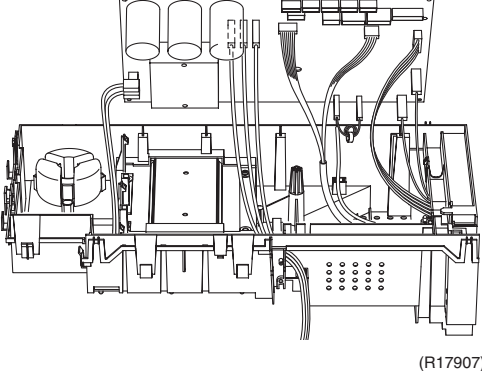
Step	Procedure	Points
15	Remove the screw on the partition plate (1).	 <p>Diagram illustrating the removal of a screw from the partition plate (1) on the electrical box. The partition plate is labeled "Partition plate (1)".</p> <p>(R6411)</p>
16	Unfasten the hook.	
17	Remove the electrical box.	 <p>Diagram illustrating the unfastening of the hook and the removal of the electrical box. The hook is labeled "Hook".</p> <p>(R17579)</p>

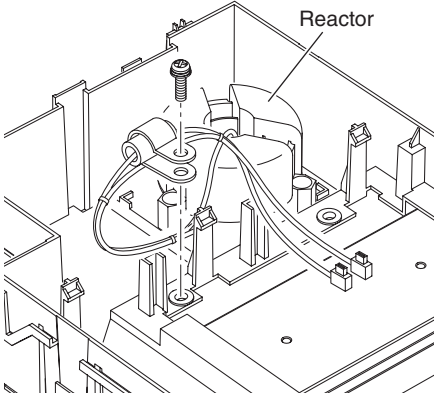
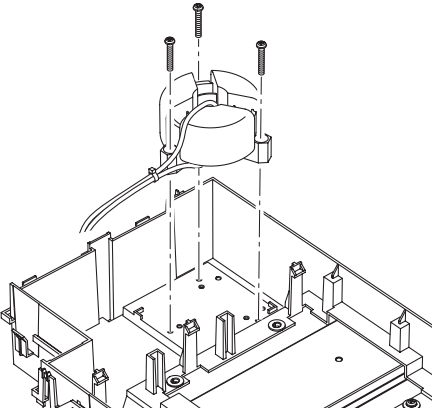
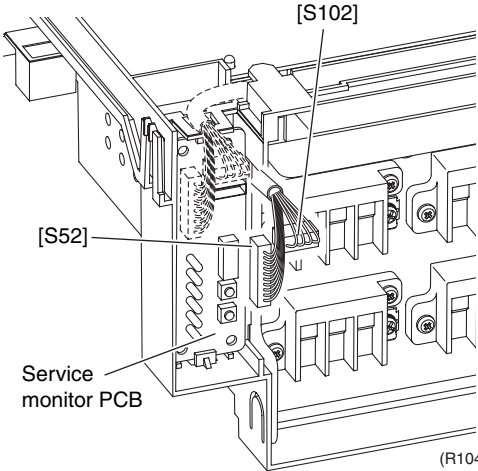
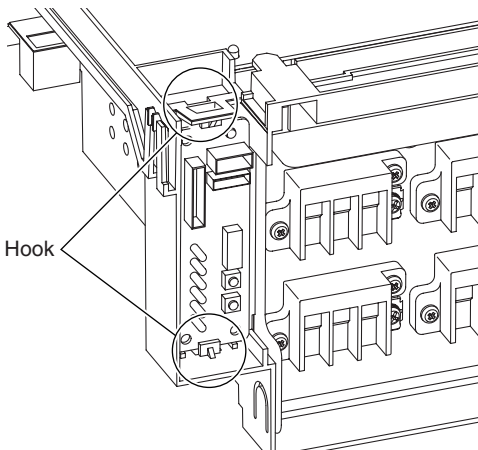
3. PCBs

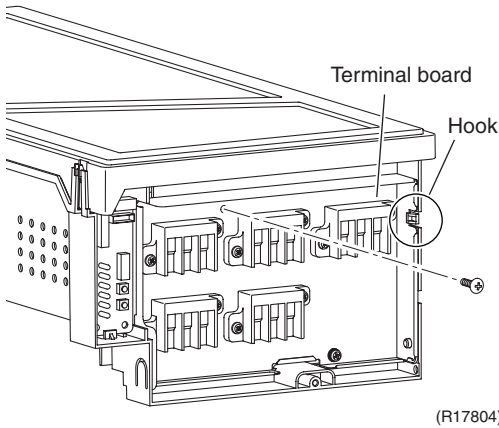
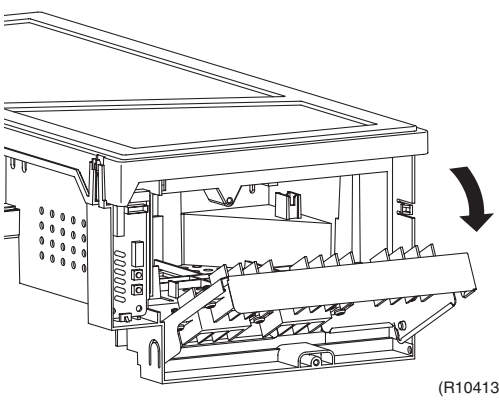


Warning

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Step	Procedure	Points
1.	Remove the main PCB.	
1	Remove the cover of the electrical box.	<ul style="list-style-type: none"> ■ Release the 4 hooks. The hooks are marked with ▼.
2	Remove the 3 screws.	
3	Unfasten the 4 hooks.	
4	Lift up the main PCB.	
5	Disconnect the connectors from the main PCB.	
6	Remove the main PCB.	

Step	Procedure	Points
<p>2. Remove the reactor.</p> <p>1 Remove the screw.</p> <p>2 Remove the 3 screws and remove the reactor.</p>	 <p style="text-align: right;">(R10409)</p>  <p style="text-align: right;">(R6434)</p>	
<p>3. Remove the service monitor PCB.</p> <p>1 Disconnect the connectors [S52] [S102] from the service monitor PCB.</p> <p>2 Unfasten the top and bottom hooks and remove the service monitor PCB.</p>	 <p style="text-align: right;">(R10410)</p>  <p style="text-align: right;">(R17803)</p>	

Step	Procedure	Points
4. Remove the terminal board.		
1	Remove the screw.	
2	Unfasten the hook.	
3	Remove the terminal board.	
	 <p>Diagram (R17804) illustrates the removal of a screw from the terminal board. The terminal board is shown in a partially open position. A screw is being removed from the right side of the board. Labels 'Terminal board' and 'Hook' are present. A circular callout highlights the screw head.</p>	
	 <p>Diagram (R10413) illustrates the removal of the terminal board. The terminal board is shown being pulled out of the chassis. A curved arrow indicates the direction of removal.</p>	

4. Fan Motor



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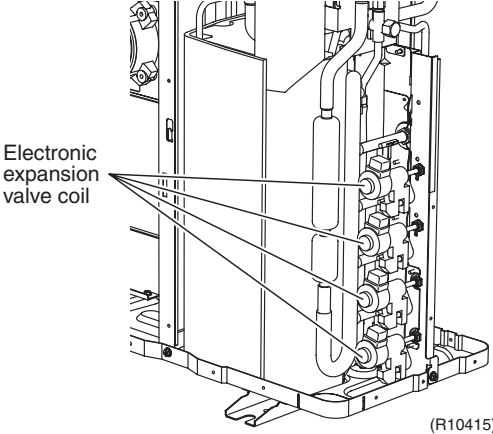
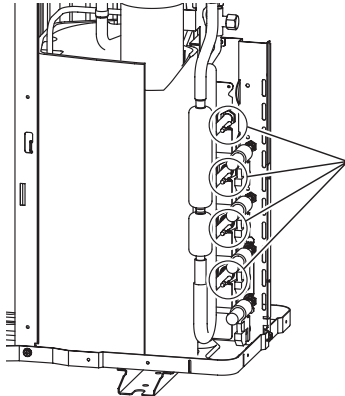
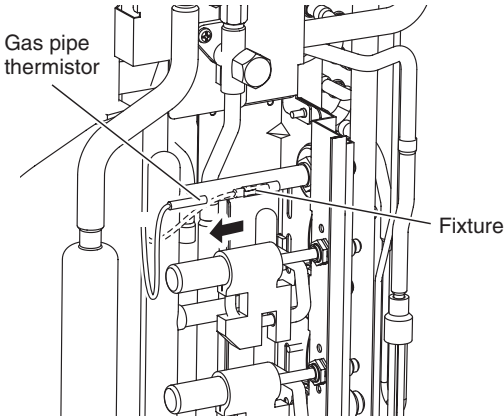
Step	Procedure	Procedure	Points
<p>1 Remove the 2 lower screws first.</p> <p>2 Then, remove the 2 upper screws.</p>		<p style="text-align: right;">(R6442)</p>	<p>■ Be sure to remove the lower screws (1) first. If the top screws (2) are removed first, the fan motor may tilt down or fall and cause injury because its center of gravity is shifted to the front.</p>
<p>3 Remove the fan motor.</p>		<p style="text-align: right;">(R6443)</p>	<p>■ When reassembling, make sure that the wire harness is facing downward.</p> <p style="text-align: right;">(R6444)</p>

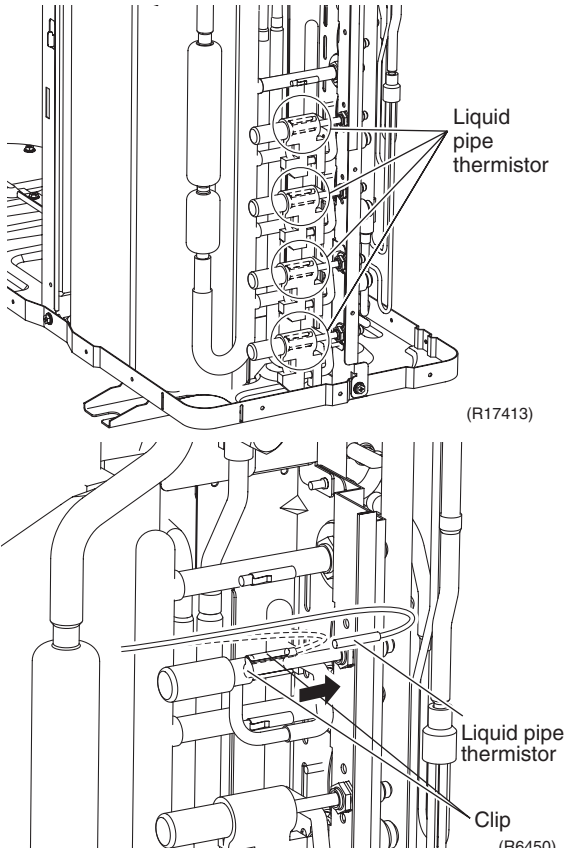
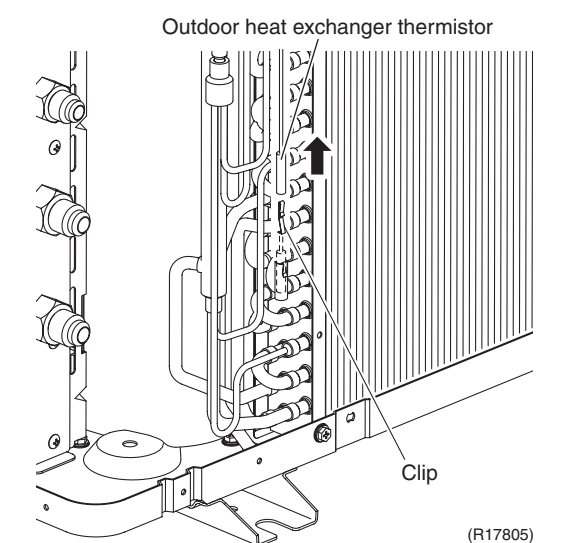
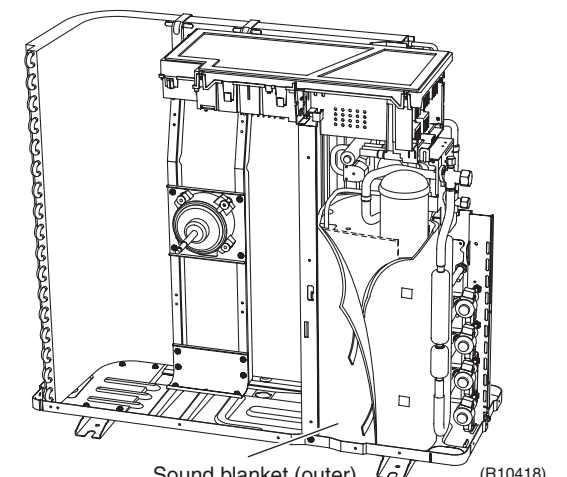
5. Coils / Thermistors

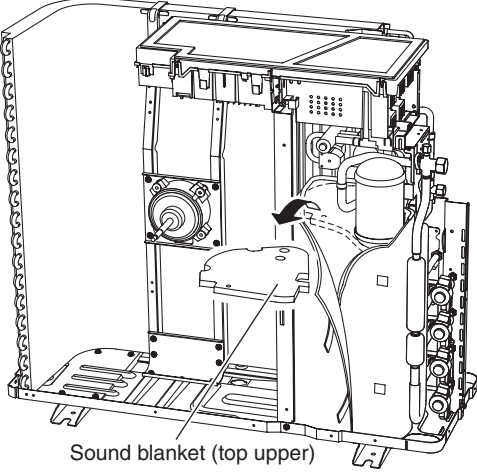
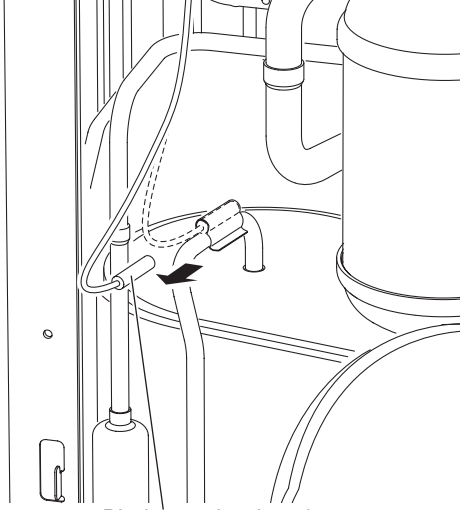
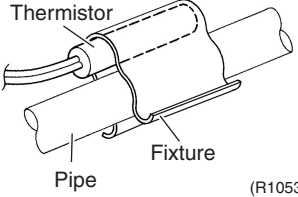
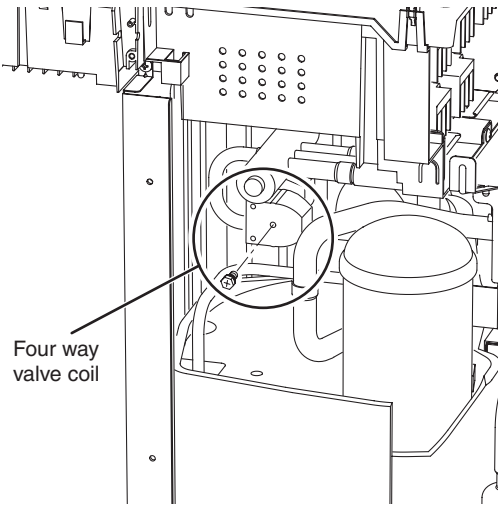


Warning

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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>	
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>Fixture</p> <p>(R18786)</p>	<ul style="list-style-type: none"> ■ When reassembling, place the thermistor so that its edge comes up to the edge of the fixture. ■ Be careful not to lose the fixtures for the thermistors.

Step	Procedure	Procedure	Points
2	Peel off the putty and pull out the liquid pipe thermistors.	 <p>Liquid pipe thermistor (R17413)</p> <p>Liquid pipe thermistor (R6450)</p> <p>Clip (R6450)</p>	<ul style="list-style-type: none"> ■ Be careful not to lose the clips for the thermistors.
3	Pull out the outdoor heat exchanger thermistor.	 <p>Outdoor heat exchanger thermistor (R17805)</p> <p>Clip (R17805)</p> <p>Clip (R5619)</p>	<ul style="list-style-type: none"> ■ Be careful not to lose the clip.
4	Slightly open the sound blanket (outer).	 <p>Sound blanket (outer) (R10418)</p>	

Step	Procedure	Points
5	<p>Remove the sound blanket (top upper).</p>  <p style="text-align: center;">Sound blanket (top upper)</p> <p style="text-align: right;">(R10419)</p>	
6	<p>Remove the discharge pipe thermistor.</p>  <p style="text-align: center;">Discharge pipe thermistor</p> <p style="text-align: right;">(R10420)</p>	<ul style="list-style-type: none"> ■ Place the thermistor so that its end comes up to the end of the fixture. ■ Be careful not to lose the fixture for the discharge pipe thermistor.  <p style="text-align: right;">(R10536)</p>
3.	<p>Remove the four way valve coil.</p>	<ul style="list-style-type: none"> ■ The cooling only models have no four way valve coil.
1	<p>Remove the screw.</p>	
2	<p>Remove the four way valve coil.</p>  <p style="text-align: center;">Four way valve coil</p> <p style="text-align: right;">(R18787)</p>	

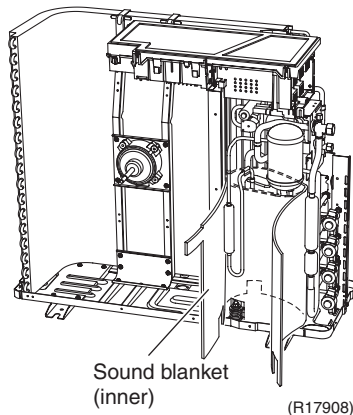
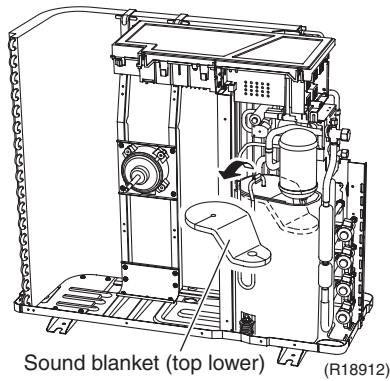
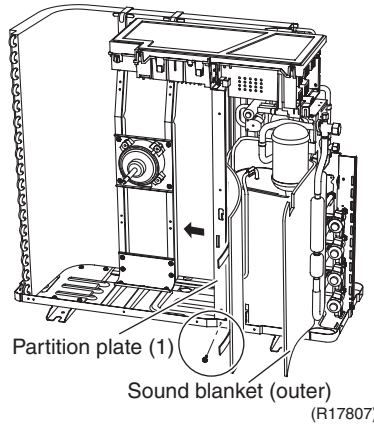
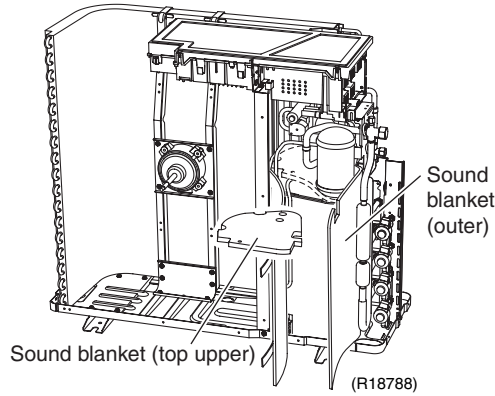
6. Sound Blankets



Warning

◆ 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).	
2	Remove the sound blanket (top upper).	
3	Remove the screw from the partition plate (1) and push the plate to the left slightly for easy work.	
4	Remove the sound blanket (outer).	
5	Remove the sound blanket (top lower).	
6	Remove the sound blanket (inner).	



■ The sound blanket is fragile. Be careful of the notches of the compressor mount (3 locations).

7. Compressor



Warning

- ◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.
- ◆ Be careful not to get yourself burnt with the pipes and other parts that are heated by the gas brazing machine.
- ◆ If the refrigerant gas leaks during work, ventilate the room. (If the refrigerant gas is exposed to flames, toxic gas may be generated.)
- ◆ Since it may happen that the refrigerant oil in the compressor catches fire, prepare wet cloth so as to extinguish fire immediately.



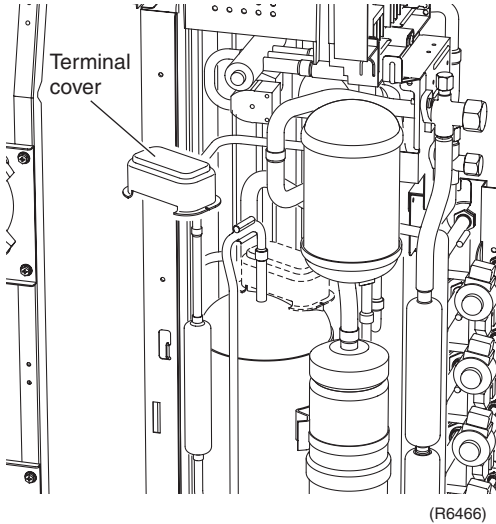
Caution

- ◆ From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.
- ◆ Restore the piping by non-oxidation brazing.

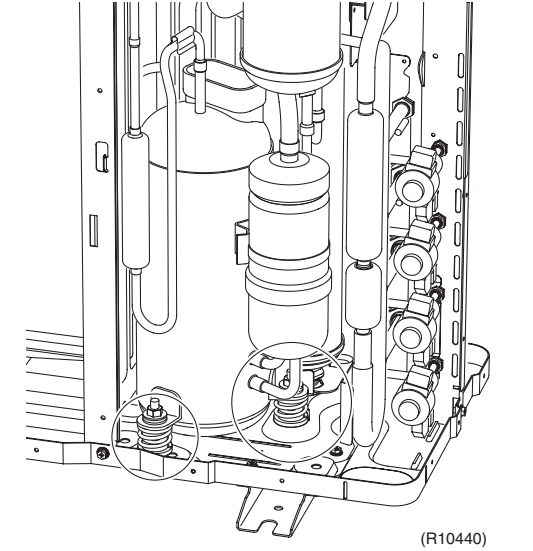
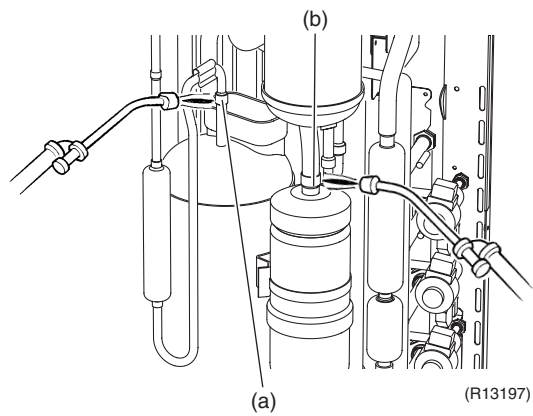
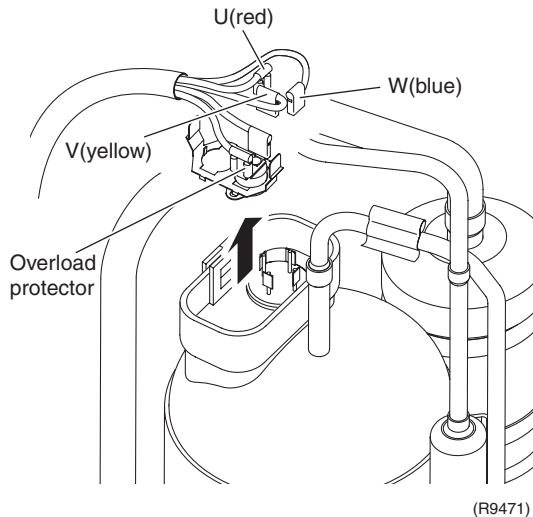


Note

- ◆ 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.
- ◆ 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 outdoor heat exchanger fin.
- ◆ In case of difficulty with gas brazing machine.
 1. Disconnect the brazed part where is easy to disconnect and restore.
 2. Cut pipes on the main unit with a tube cutter in order to make it easy to disconnect.

Step	Procedure	Points
1	Remove the terminal cover.	

Step	Procedure	Points
2	Disconnect the compressor lead wires.	
3	Remove the overload protector.	
4	Heat up the brazed part of the discharge side pipe (a) and withdraw the piping.	
5	Heat up the brazed part of the suction side pipe (b) and withdraw the piping.	
6	Remove the 2 nuts.	■ Some models have 3 nuts.
7	Remove the compressor.	



Revision History

Month / Year	Version	Revised contents
09 / 2012	Si121292	First edition
04 / 2013	Si121292_A	Model addition: 4MXS80E3V3B, 5MXS90E3V3B
08 / 2014	Si121292EB	Model addition: 4MK(X)S80LVMA9
04 / 2015	Si121292EC	Model addition: 4MKS80FSG

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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