




REMOVAL PROCEDURE



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

9.0/9.5/10.0/10.5/11.0 kW Class **32000/36000/38000 Btu/h Class**

-  Outdoor Unit
-  Inverter
-  Multi Type



Service Manual Removal Procedure

Outdoor Unit

●Cooling Only

5MKS100LSG

**5MKS100LVMA
5MKS100LVMA9**

5MKS110LVM

**MKM95PV14
MKM105PV14**

**MKM95PV1G
MKM105PV1G**

**MKM32PV2S
MKM36PV2S**

**MKM95PVM
MKM105PVM**

MKS90QVMG

●Heat Pump

4MXM110PVLT

**5MXS100LVMA
5MXS100LVMA9**

5MXS110LVM

5MXS38PMVM

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Note:

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

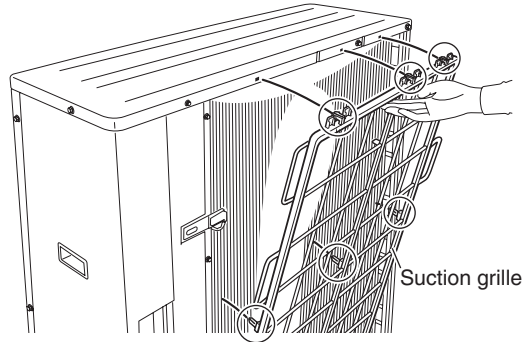
1. Outer Panels



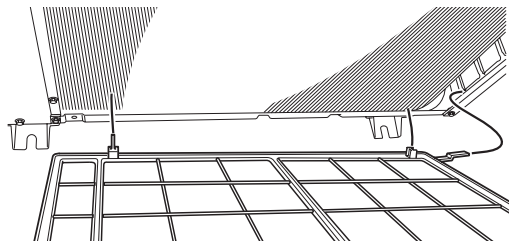
Warning

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

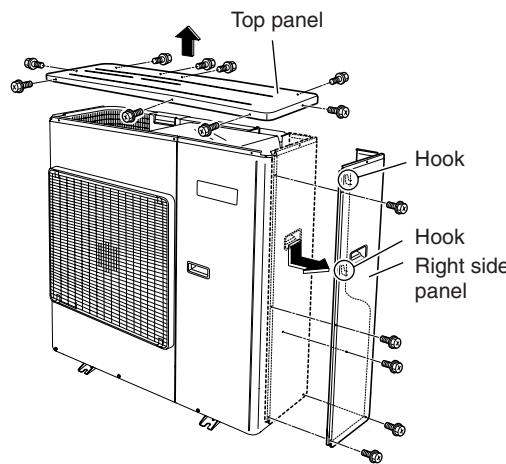
Step	Procedure	Points
1	Unfasten the 3 hooks at the upper first, and then 3 hooks at the middle.	<ul style="list-style-type: none"> ■ The hooks are secured in the clearances of the outdoor heat exchanger fins.
2	Unfasten the 3 hooks at the bottom and remove the suction grille.	
3	Remove the 9 screws, and then the top panel.	
4	Remove the 5 screws, and then the right side panel.	<ul style="list-style-type: none"> ■ Slide the right side panel downward to unfasten the 2 hooks on the front side.
5	Remove the screw, and then the front panel (2).	<ul style="list-style-type: none"> ■ Slide the front panel (2) downward to unfasten the 3 hooks.



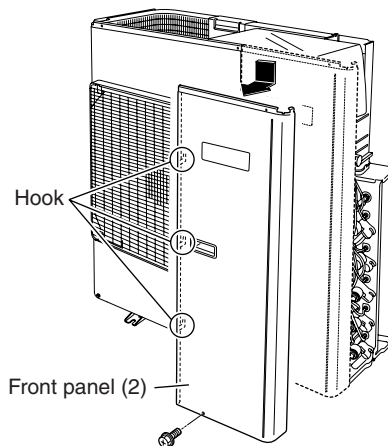
(R18259)



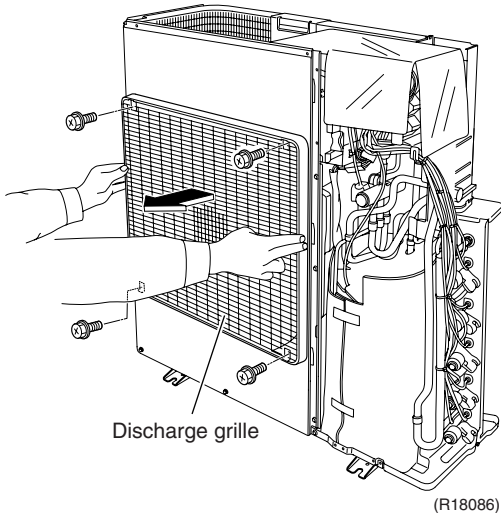
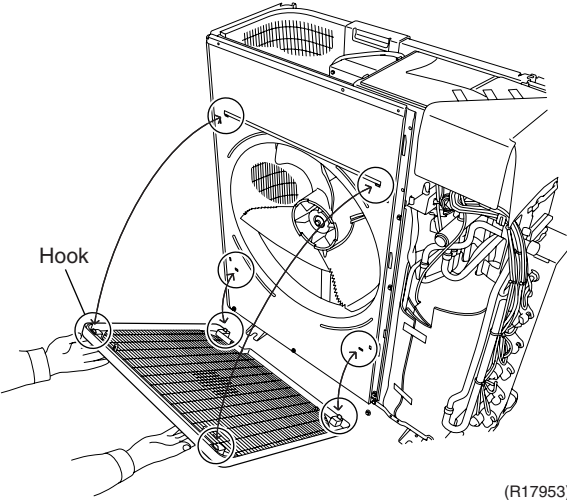
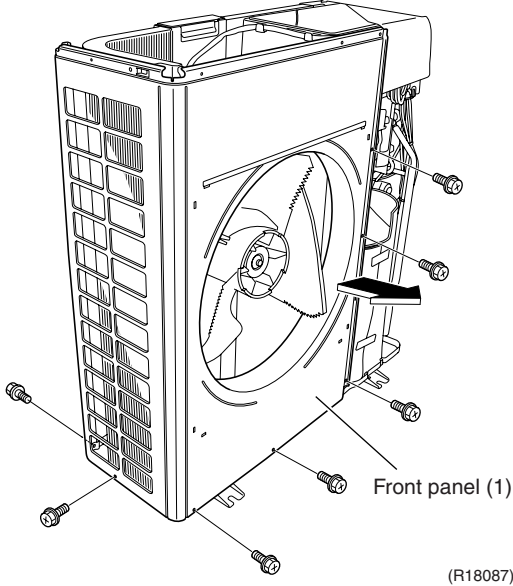
(R18260)



(R18084)



(R18085)

Step	Procedure	Points
6	Remove the 4 screws on the discharge grille.	
	 <p style="text-align: center;">Discharge grille</p> <p style="text-align: right;">(R18086)</p>	
7	Slide the discharge grille upward and unfasten the 4 hooks.	
8	Remove the discharge grille.	
	 <p style="text-align: right;">(R17953)</p>	
9	Remove the 7 screws, and then the front panel (1).	<p>■ You can remove the front panel (1) without removing the discharge grille.</p>
	 <p style="text-align: right;">Front panel (1)</p> <p style="text-align: right;">(R18087)</p>	

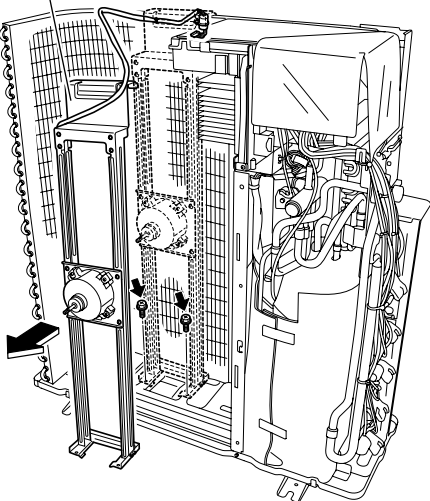
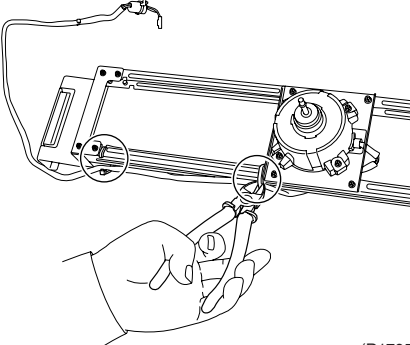
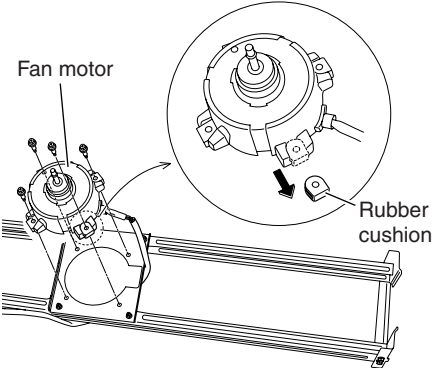
2. Outdoor Fan / Fan Motor



Warning

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Step	Procedure	Points
1. Remove the outdoor fan.		
1 Detach the clamp for the fan motor lead wire.	<p>Clamp</p> <p>(R22548)</p>	
2 Disconnect the connector [S70].		[S70]: fan motor
3 Release the fan motor lead wire from the 3 hooks.	<p>Hook</p> <p>[S70]</p> <p>Fan motor lead wire</p> <p>(R17956)</p>	<p>■ When reassembling, put the fan motor lead wire through the back of the fan motor so as not to be entangled with the outdoor fan.</p>
4 Remove the nut, and then the outdoor fan.	<p>Outdoor fan</p> <p>Nut</p> <p>D-cut</p> <p>Motor shaft</p> <p>(R17957)</p>	<p>■ Nut size: M8</p> <p>13 mm (0.51 inch)</p> <p>(R20767)</p> <p>■ When reassembling, align the ▼ mark of the outdoor fan with the D-cut section of the motor shaft.</p>

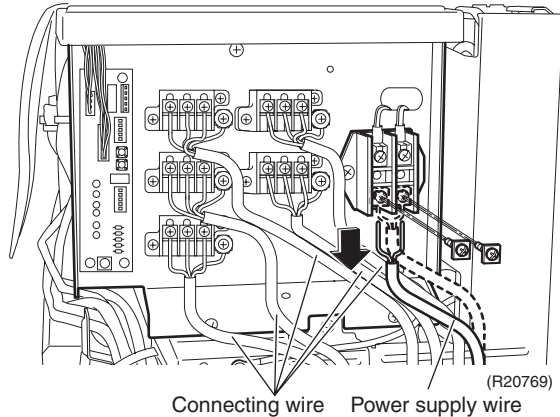
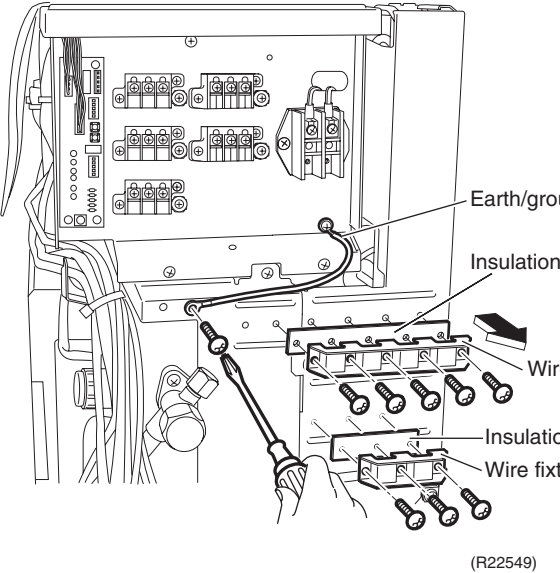
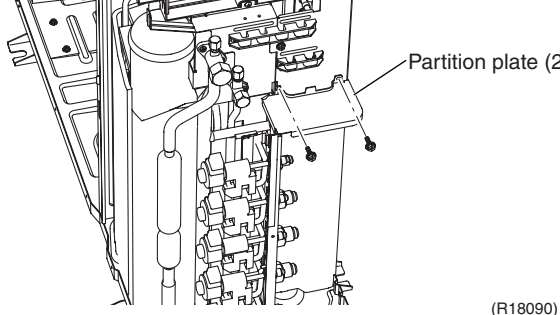
Step	Procedure	Points
2. Remove the fan motor.	Fan motor fixing frame	
1	Remove the 2 screws, and then the fan motor fixing frame.	 <p data-bbox="890 775 959 797">(R17958)</p>
2	Cut the 2 clamps.	 <p data-bbox="927 1182 995 1205">(R17959)</p>
3	Remove the 4 screws, and then the fan motor.	 <p data-bbox="895 1626 963 1648">(R17960)</p>

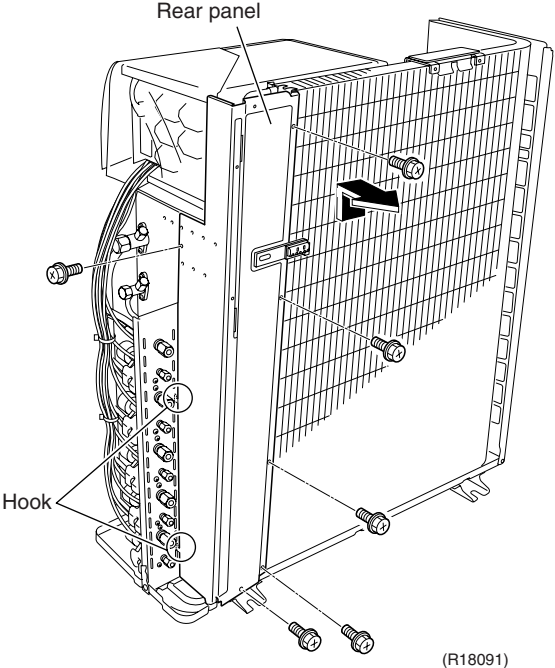
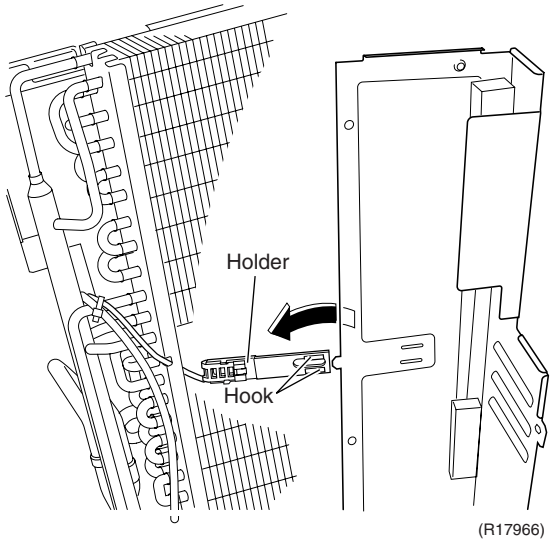
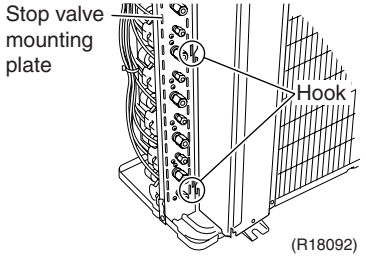
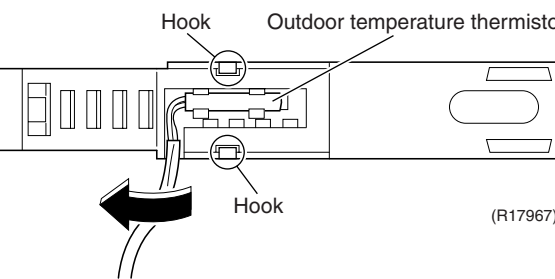
3. Electrical Box

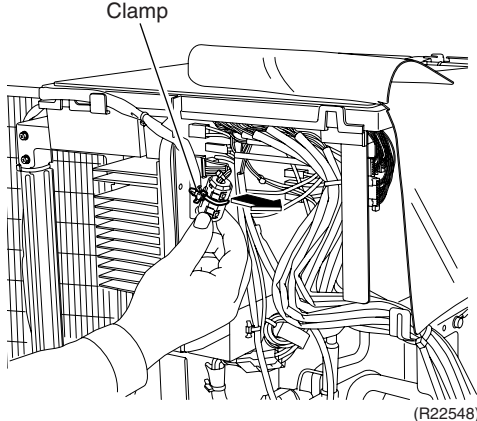
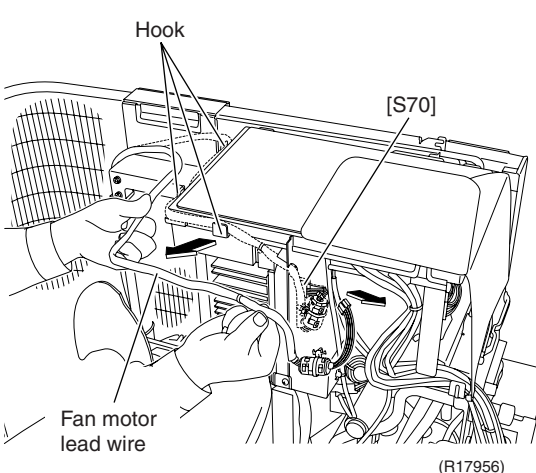
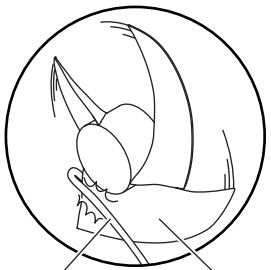
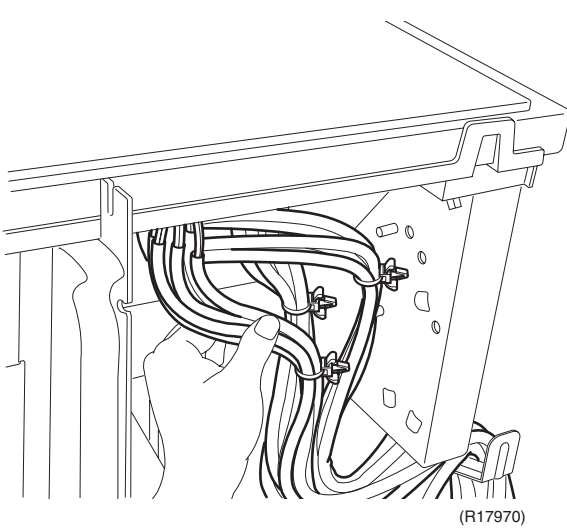
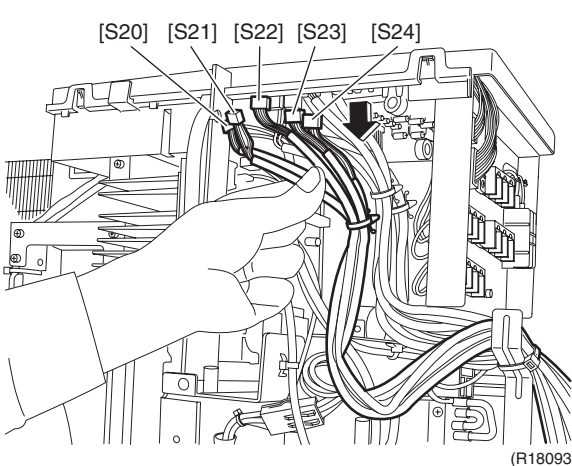


Warning

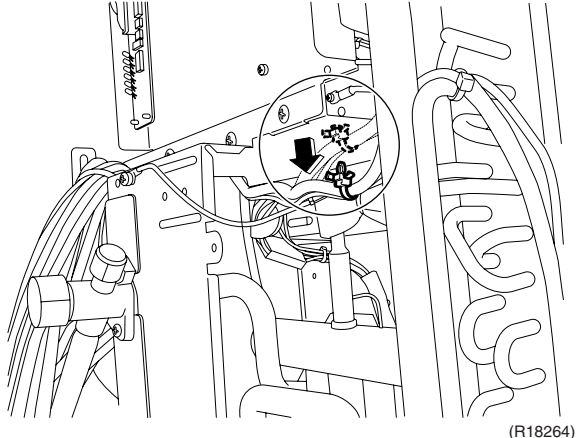
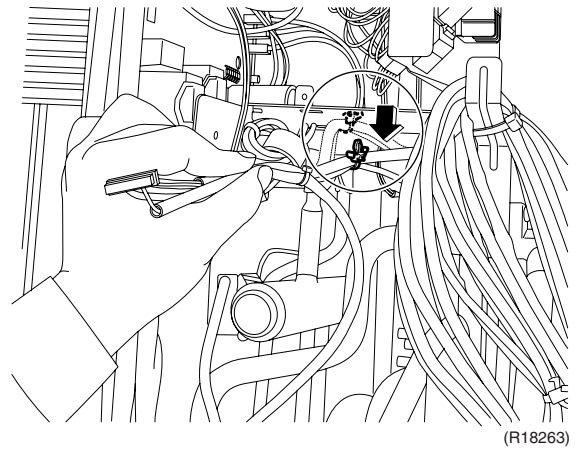
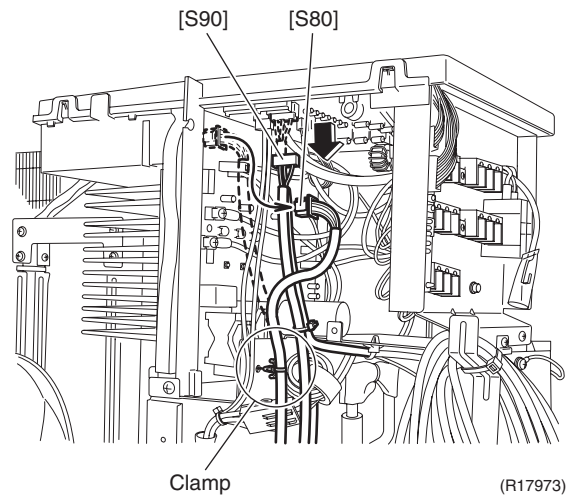
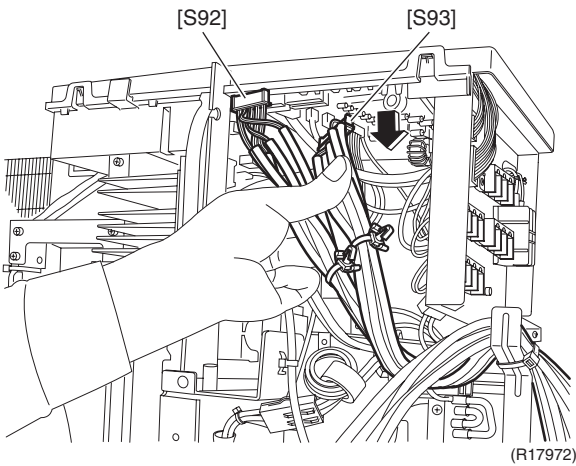
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Step	Procedure	Points
1. Disconnect the connecting wires.	 <p>(R20769)</p>	<p>■ 4-room models have no connector for room E.</p>
1 Remove the 2 screws and disconnect the power supply wire.	<p>2 Remove the screws and disconnect the connecting wires of rooms A ~ E.</p>	
3 Remove the screw to detach the earth/ground wire.	 <p>(R22549)</p>	
4 Remove the 8 screws on the wire fixtures.	5 Remove the insulation sheets.	
6 Remove the 2 screws, and then the partition plate (2).	 <p>(R18090)</p>	

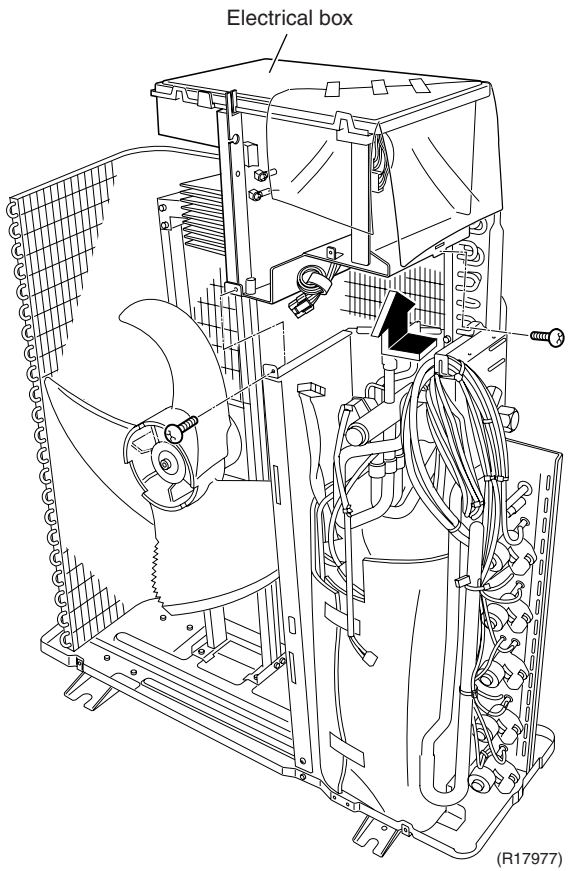
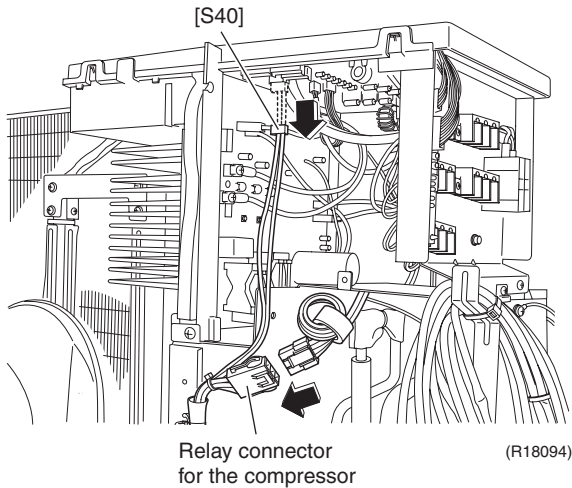
Step	Procedure	Points
2. Remove the rear panel.	<p data-bbox="660 226 767 255">Rear panel</p>  <p data-bbox="504 712 560 741">Hook</p> <p data-bbox="948 875 1015 904">(R18091)</p>	<p data-bbox="1094 210 1461 344">■ When reassembling, be sure to insert the 2 hooks into the holes on the stop valve mounting plate.</p>
<p data-bbox="153 246 453 275">1 Remove the 6 screws.</p> <p data-bbox="153 315 464 412">2 Slide the rear panel upward to unfasten the 2 hooks.</p>	 <p data-bbox="727 1173 799 1202">Holder</p> <p data-bbox="727 1308 783 1337">Hook</p> <p data-bbox="979 1442 1046 1471">(R17966)</p>	 <p data-bbox="1094 394 1198 472">Stop valve mounting plate</p> <p data-bbox="1382 629 1449 658">(R18092)</p>
<p data-bbox="153 911 464 1046">3 Unfasten the 2 hooks to release the holder of the outdoor temperature thermistor.</p>	 <p data-bbox="663 1503 719 1532">Hook</p> <p data-bbox="767 1503 1062 1532">Outdoor temperature thermistor</p> <p data-bbox="735 1682 791 1711">Hook</p> <p data-bbox="995 1695 1062 1724">(R17967)</p>	
<p data-bbox="153 1487 464 1621">4 Unfasten the 2 hooks to open the holder and pull out the outdoor temperature thermistor.</p>		

Step	Procedure	Points
3. Remove the electrical box.		
1 Detach the clamp of the fan motor lead wire.	 <p>Clamp</p> <p>(R22548)</p>	
2 Disconnect the connector [S70].	 <p>Hook</p> <p>[S70]</p> <p>Fan motor lead wire</p> <p>(R17956)</p>	<p>[S70]: fan motor</p> <ul style="list-style-type: none"> When reassembling, put the fan motor lead wire through the back of the fan motor so as not to be entangled with the outdoor fan.
3 Release the fan motor lead wire from the 3 hooks.		 <p>Lead wire</p> <p>Outdoor fan</p> <p>(R3249)</p>
4 Detach the 3 clamps.	 <p>(R17970)</p>	
5 Disconnect the 5 connectors for the electronic expansion valve coils.	 <p>[S20] [S21] [S22] [S23] [S24]</p> <p>(R18093)</p>	<p>[S20] (white): room A [S21] (red): room B [S22] (blue): room C [S23] (yellow): room D [S24] (white): room E</p> <ul style="list-style-type: none"> 4-room models do not have [S24].

Step	Procedure	Points
6	Disconnect the connectors [S92] and [S93].	[S92]: gas pipe thermistors [S93]: liquid pipe thermistors
7	Disconnect the connector [S80] and pull out the clamp.	[S80]: four way valve coil
8	Disconnect the connector [S90].	■ The cooling only models have no harness for [S80]. [S90]: thermistor ASSY
9	Pull out the 2 clamps which fix the harnesses of the thermistor ASSY under the electrical box.	



Step	Procedure	Points
10	Disconnect the connector [S40].	[S40]: overload protector
11	Disconnect the relay connector for the compressor.	
12	Remove the 2 screws.	
13	Slide the electrical box to the left and remove it.	



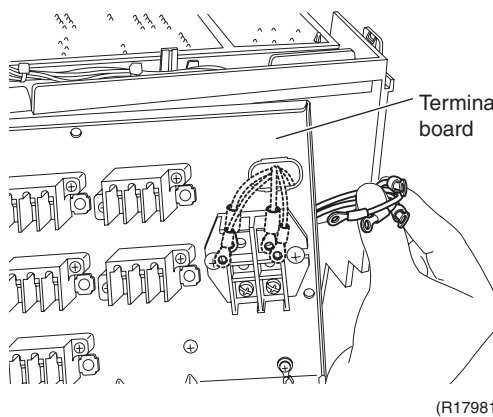
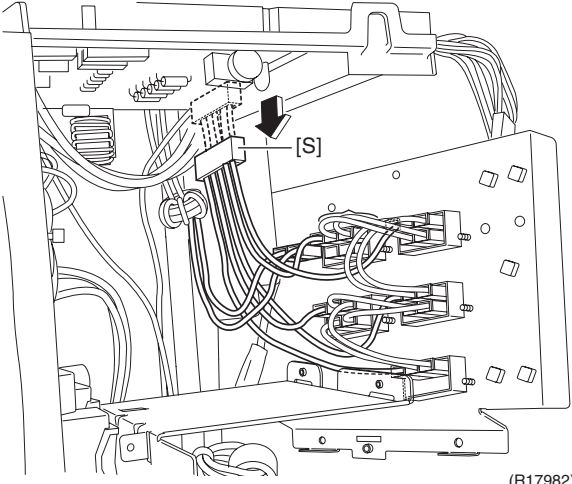
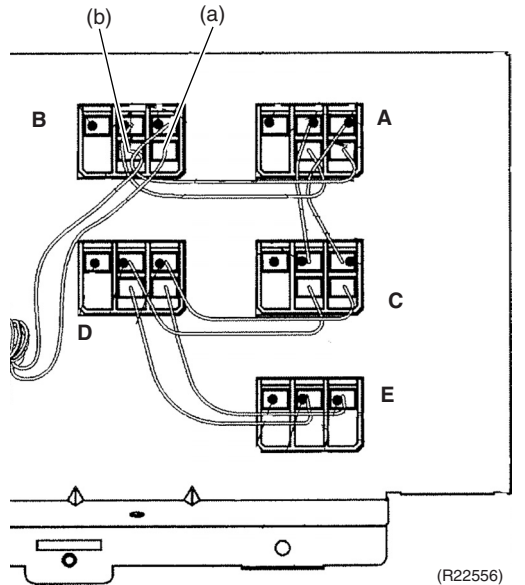
4. PCBs

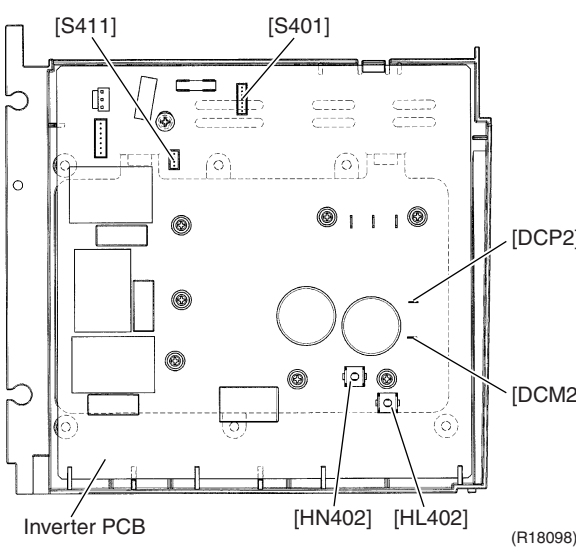
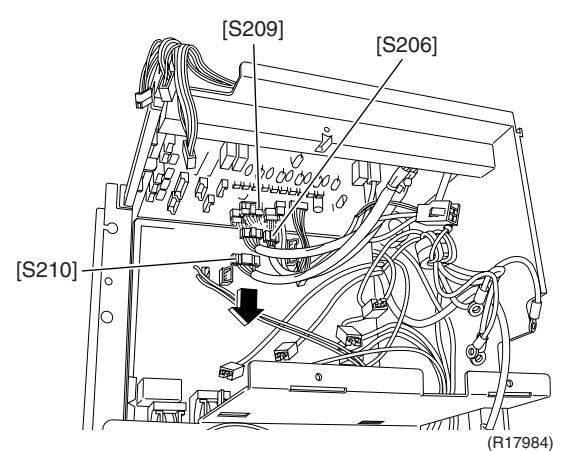
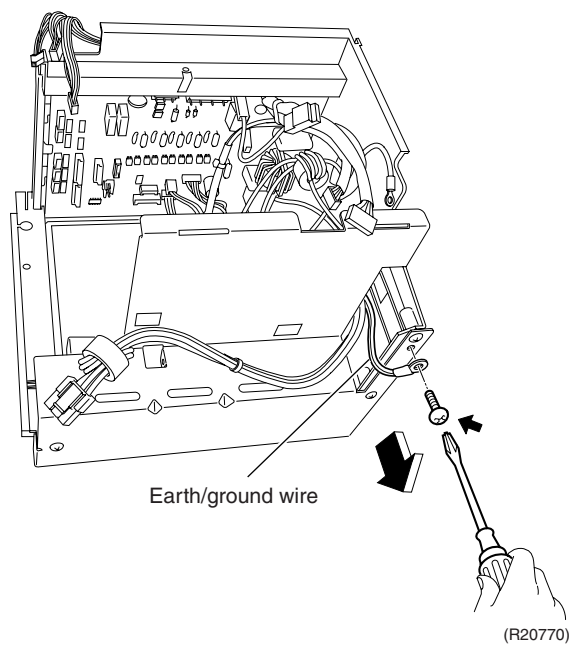


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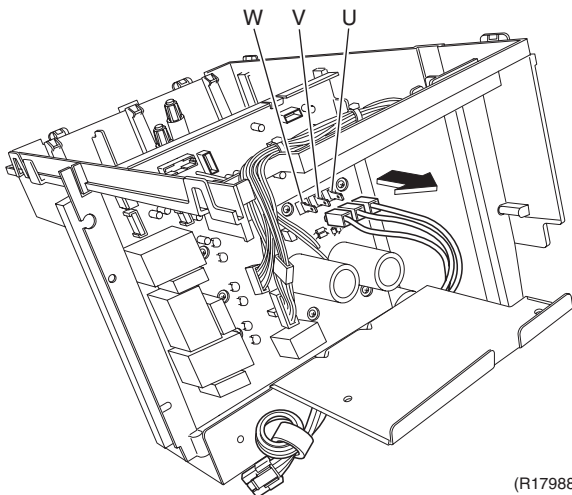
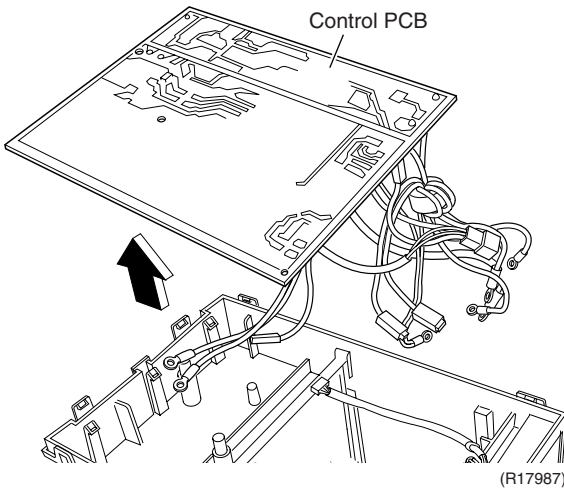
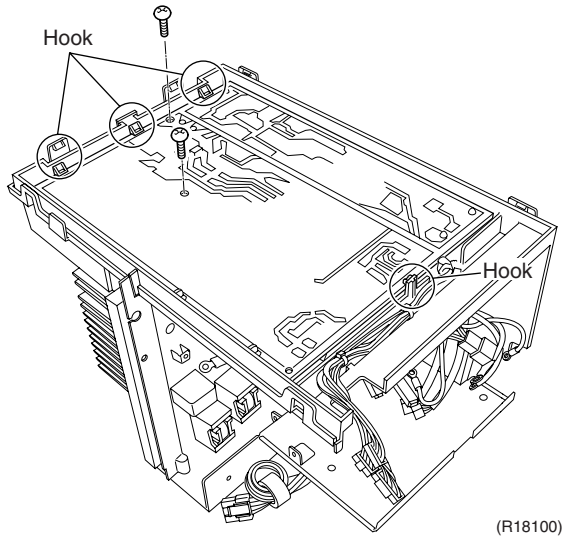
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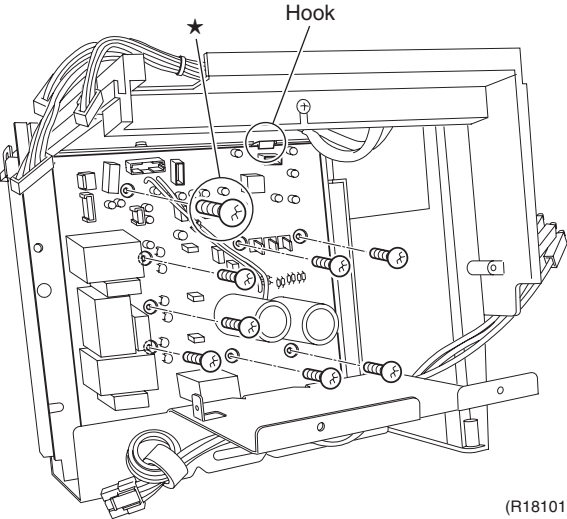
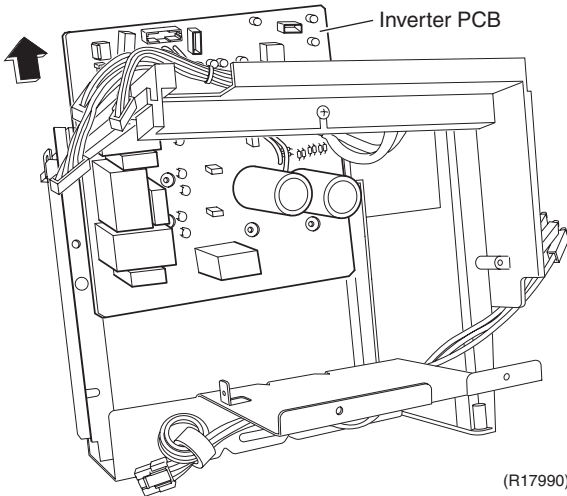
Step	Procedure	Points
<p>1. Remove the service monitor PCB.</p>	<p style="text-align: center;">Electrical box cover</p> <p style="text-align: center;">Hook</p> <p style="text-align: center;">Hook</p> <p style="text-align: center;">Hook</p> <p style="text-align: center;">Hook</p> <p style="text-align: right;">(R18095)</p>	<p>[S501] (red): for [S209] on control PCB [S502] (yellow): for [S210] on control PCB [S503] (white): for [S206] on control PCB</p>
<p>2. Disconnect the connectors [S501], [S502] and [S503] from the service monitor PCB.</p> <p>3. Detach the 4 projections and remove the service monitor PCB.</p>	<p style="text-align: center;">Projection</p> <p style="text-align: center;">[S503]</p> <p style="text-align: center;">[S501]</p> <p style="text-align: center;">[S502]</p> <p style="text-align: center;">Service monitor PCB</p> <p style="text-align: center;">Projection</p> <p style="text-align: right;">(R22550)</p>	
<p>2. Remove the terminal board.</p>	<p style="text-align: center;">Power supply terminal board</p> <p style="text-align: center;">Terminal board</p> <p style="text-align: right;">(R18097)</p>	<p style="text-align: center;">brown</p> <p style="text-align: center;">black</p> <p style="text-align: center;">blue</p> <p style="text-align: center;">white</p> <p style="text-align: right;">(R18107)</p>

Step	Procedure	Points																																						
3	Pass the harnesses through the hole on the terminal board.																																							
4	Disconnect the connector [S].																																							
5	Disconnect the 2 lower connectors (a) and (b) of the room B.																																							
6	Remove the terminal board.	<table border="1" data-bbox="1093 1176 1460 1758"> <thead> <tr> <th>Terminal</th> <th>upper</th> <th>lower</th> </tr> </thead> <tbody> <tr> <td rowspan="3">A</td> <td>1 black</td> <td>black</td> </tr> <tr> <td>2 white</td> <td>white</td> </tr> <tr> <td>3 red</td> <td>–</td> </tr> <tr> <td rowspan="3">B</td> <td>1 black</td> <td>black</td> </tr> <tr> <td>2 white</td> <td>white</td> </tr> <tr> <td>3 yellow</td> <td>–</td> </tr> <tr> <td rowspan="3">C</td> <td>1 black</td> <td>black</td> </tr> <tr> <td>2 white</td> <td>white</td> </tr> <tr> <td>3 blue</td> <td>–</td> </tr> <tr> <td rowspan="3">D</td> <td>1 black</td> <td>black ★</td> </tr> <tr> <td>2 white</td> <td>white ★</td> </tr> <tr> <td>3 orange</td> <td>–</td> </tr> <tr> <td rowspan="3">E</td> <td>1 black</td> <td>–</td> </tr> <tr> <td>2 white</td> <td>–</td> </tr> <tr> <td>3 gray</td> <td>–</td> </tr> </tbody> </table> <p data-bbox="1093 1792 1460 1859">★ Not available for 4-room models.</p>	Terminal	upper	lower	A	1 black	black	2 white	white	3 red	–	B	1 black	black	2 white	white	3 yellow	–	C	1 black	black	2 white	white	3 blue	–	D	1 black	black ★	2 white	white ★	3 orange	–	E	1 black	–	2 white	–	3 gray	–
Terminal	upper	lower																																						
A	1 black	black																																						
	2 white	white																																						
	3 red	–																																						
B	1 black	black																																						
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	3 yellow	–																																						
C	1 black	black																																						
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	3 blue	–																																						
D	1 black	black ★																																						
	2 white	white ★																																						
	3 orange	–																																						
E	1 black	–																																						
	2 white	–																																						
	3 gray	–																																						

Step	Procedure	Points
3. Remove the control PCB.	 <p>Inverter PCB (R18098)</p>	<p>[HL402]: blue [HN402]: white</p> <p>[DCP2]: purple [DCM2]: brown</p> <p>[S401]: for [S202] on control PCB [S411]: for [S211] on control PCB</p>
4. Disconnect the connectors [S206], [S209] and [S210] from the control PCB.	 <p>(R17984)</p>	<p>[S206]: for [S503] on service PCB [S209]: for [S501] on service PCB [S210]: for [S502] on service PCB</p>
5. Remove the screw of the earth/ground wire under the electrical box.	 <p>Earth/ground wire (R20770)</p>	

Step	Procedure	Points
6	Remove the 2 screws and unfasten the 4 hooks.	
7	Lift up and remove the control PCB.	
4. Remove the inverter PCB.		
1	Disconnect the connectors of the compressor harness [U], [V] and [W].	



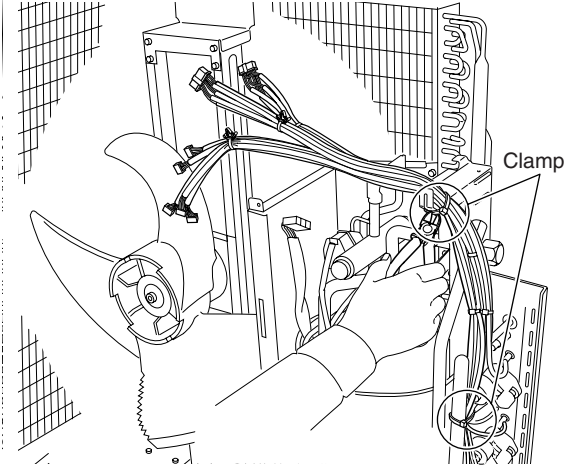
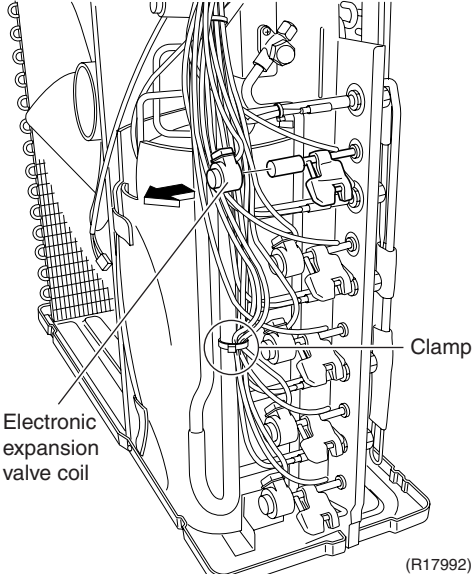
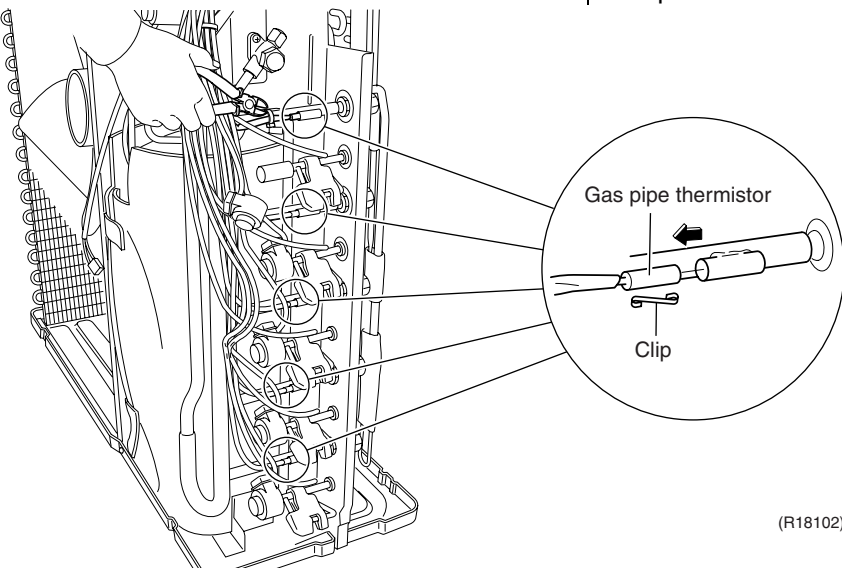
Step	Procedure	Points
2	Remove the 8 screws.	<ul style="list-style-type: none"> ■ The screw marked with ★ is larger than the others. (M4 × 16)
3	Unfasten the hook and remove the inverter PCB.	
 <p style="text-align: right;">(R18101)</p>		
 <p style="text-align: right;">(R17990)</p>		

5. Coils / Thermistors

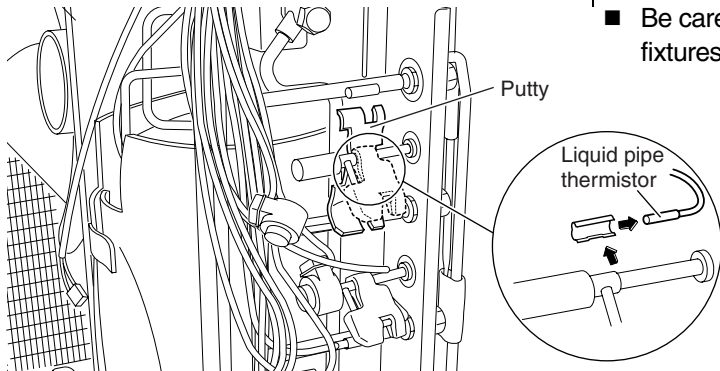


Warning

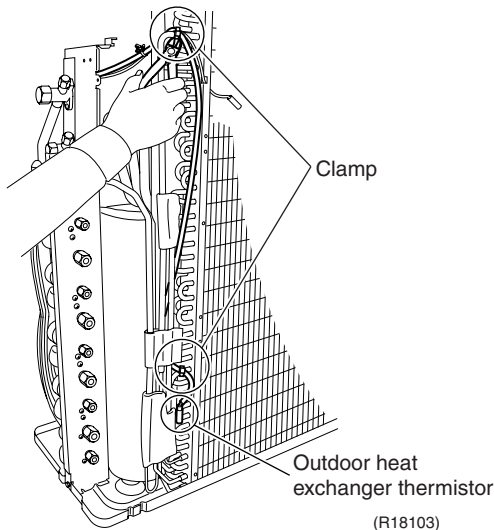
♦ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
<p>1. Remove the electronic expansion valve coils.</p> <p>1 Cut the 3 clamps.</p> <p>2 Pull out the electronic expansion valve coils.</p>	 <p>(R17991)</p>  <p>(R17992)</p>	<p>■ The number of electronic expansion valve coils and thermistors varies depending on the model.</p>
<p>2. Remove the thermistors.</p> <p>1 Cut the clamps and pull out the gas pipe thermistors.</p>	 <p>(R18102)</p>	<p>■ Be careful not to lose the clips for the thermistors.</p>

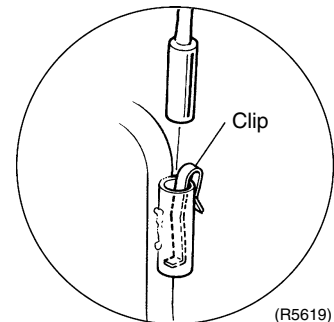
Step	Procedure	Points
2	Peel off the putty and pull out the liquid pipe thermistors.	<ul style="list-style-type: none"> Be careful not to lose the fixtures for the thermistors.
3	Cut the 2 clamps and pull out the outdoor heat exchanger thermistor.	<ul style="list-style-type: none"> Be careful not to lose the clip for the thermistor.
4	Pull out the outdoor temperature thermistor through the hole.	<ul style="list-style-type: none"> The positions of the clamp and outdoor heat exchanger thermistor vary depending on the model.
5	Slightly open the sound blanket (top) and remove the discharge pipe thermistor.	<ul style="list-style-type: none"> Be careful not to lose the fixture for the thermistor.



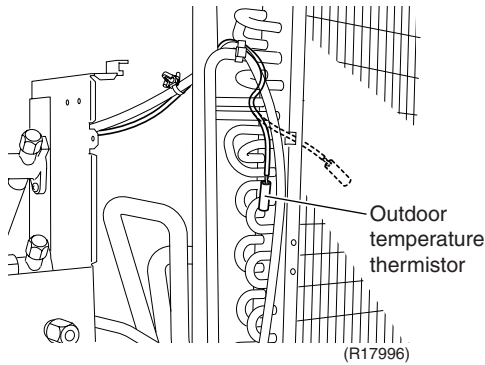
(R17994)



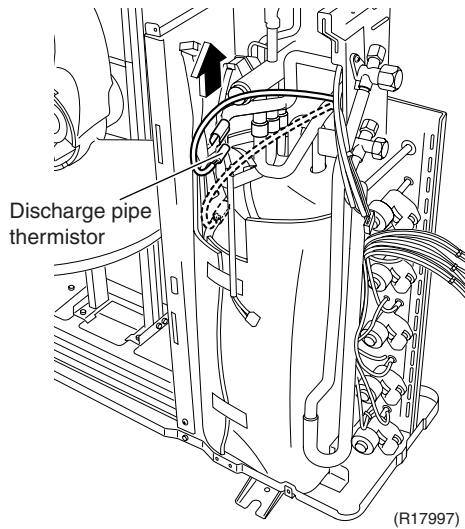
(R18103)



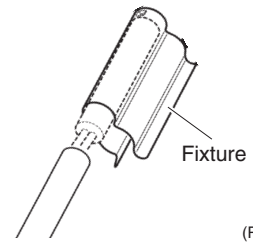
(R5619)



(R17996)



(R17997)



(R21395)

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	Pull out the clamp of the compressor harness from the partition plate.	
2	Remove the 4 screws, and then the partition plate.	
	<p>(R20771)</p>	
	<p>(R17999)</p>	<p>■ When reassembling, fit the hook on the partition plate to the notch of the outdoor heat exchanger plate.</p>
	<p>(R18261)</p>	
3	Remove the sound blanket (outer top).	
4	Remove the sound blanket (outer).	
	<p>(R22551)</p>	<p>■ Since the piping ports on the sound blankets are torn easily, remove the blankets carefully.</p>
5	Remove the sound blanket (inner top).	
6	Remove the sound blanket (inner).	
	<p>(R22552)</p>	

7. Four Way Valve



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.)



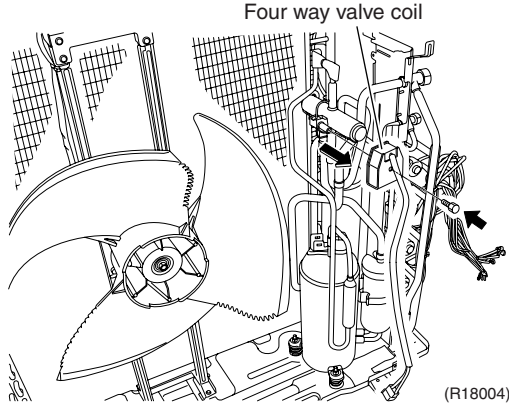
Caution

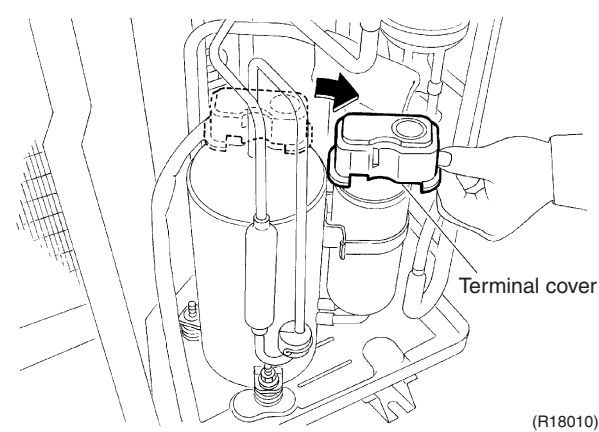
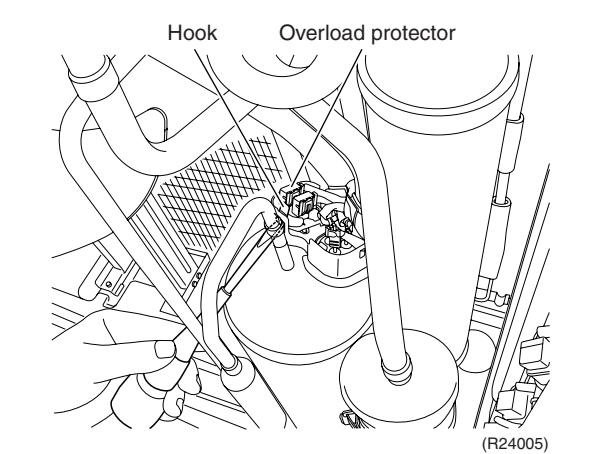
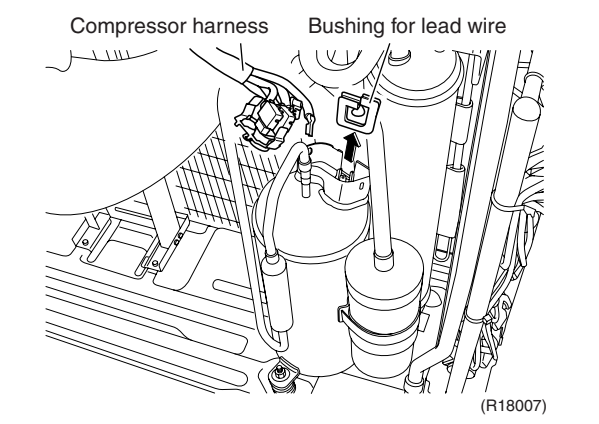
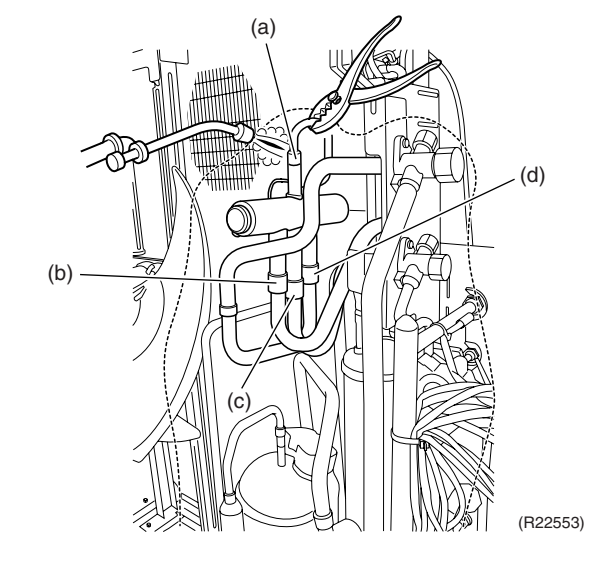
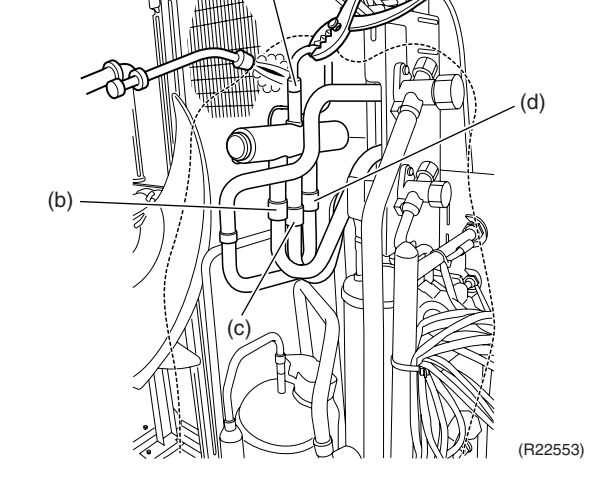
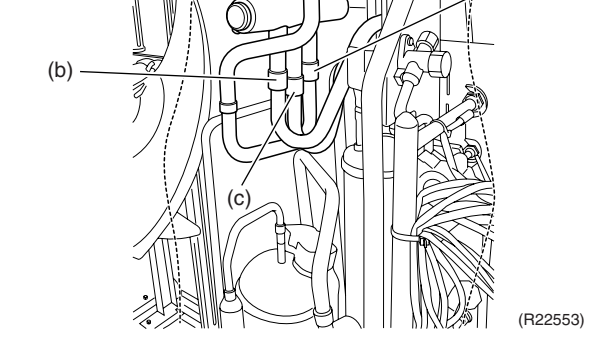
- ◆ From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.
- ◆ Cautions for restoration
 1. Restore the piping by non-oxidation brazing.
 2. It is required to prevent the carbonization of the oil inside the four way valve and the deterioration of the gaskets affected by heat. (Keep below 120°C (248°F).) For the sake of this, wrap the four way valve with wet cloth and provide water so that the cloth does not dry.



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 peripheries. 1 Remove the screw, and then the four way valve coil.		<ul style="list-style-type: none"> ■ The cooling only models have no four way valve coil.

Step	Procedure	Points
2	Remove the terminal cover.	
3	Unfasten the hook with a flat screwdriver and remove the overload protector.	
4	Disconnect the terminals of the compressor harness.	
5	Remove the bushing for the lead wire.	<p>U: red V: yellow W: blue</p>
2. Remove the four way valve.		
1	Heat up the brazed parts in order of (a) (b) (c) (d).	
2	Remove the four way valve.	

8. 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.



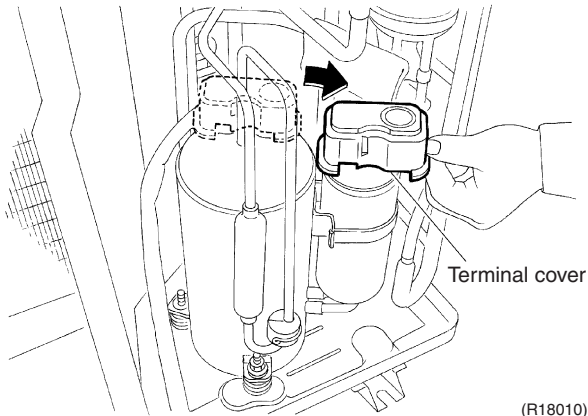
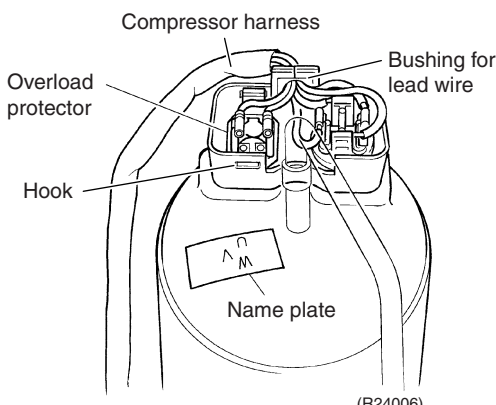
Caution

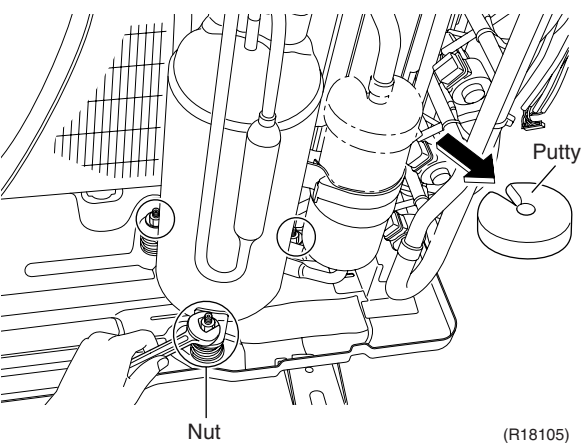
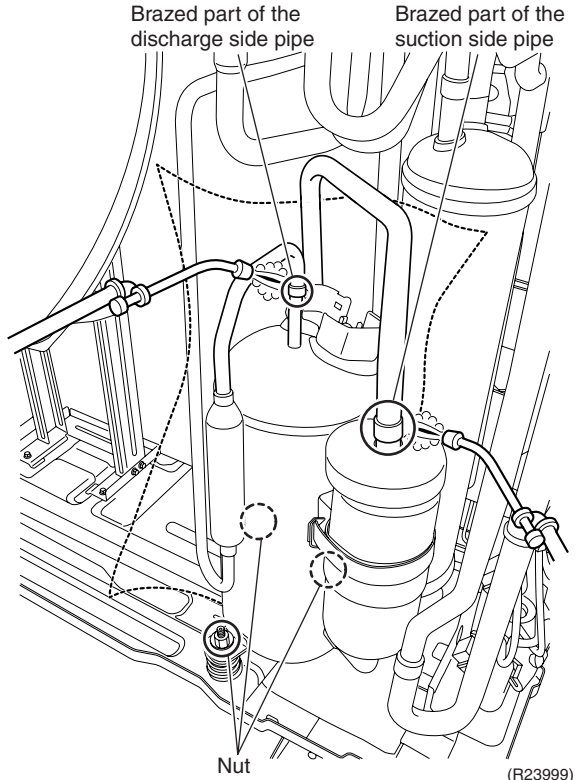
- ◆ From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.
- ◆ Restore the piping by non-oxidation brazing.



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.	 <p>(R18010)</p>  <p>(R24006)</p> <p>U: red V: yellow W: blue</p>
2	Unfasten the hook with a flat screwdriver and remove the overload protector.	
3	Disconnect the terminals of the compressor harness.	
4	Remove the bushing for the lead wire.	

Step	Procedure	Points
5	Remove the 3 nuts of the compressor.	
6	Remove the putty.	
 <p data-bbox="676 629 715 651">Nut</p> <p data-bbox="995 629 1066 651">(R18105)</p> <p data-bbox="1023 344 1075 367">Putty</p>		
7	Heat up the brazed part of the discharge side pipe and disconnect it.	
8	Heat up the brazed part of the suction side pipe and disconnect it.	
9	Remove the 3 nuts of the compressor.	
10	Lift up the compressor and remove it.	
 <p data-bbox="619 703 804 748">Brazed part of the discharge side pipe</p> <p data-bbox="884 703 1059 748">Brazed part of the suction side pipe</p> <p data-bbox="708 1458 746 1480">Nut</p> <p data-bbox="995 1458 1066 1480">(R23999)</p>		

Revision History

Month / Year	Version	Revised contents
11 / 2012	Si121293	First edition
08 / 2014	Si121293EA	Model addition: 5MK(X)S100LVMA9
10 / 2015	Si121293EB	Model addition: MKM95/105PV14, MKM95/105PV1G, MKM32/36PV2S, 4MXM110PVL
09 / 2016	Si121293EC	Model addition: MKM95/105PVM, MKS90QVMG, 5MXS38PMVM

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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