




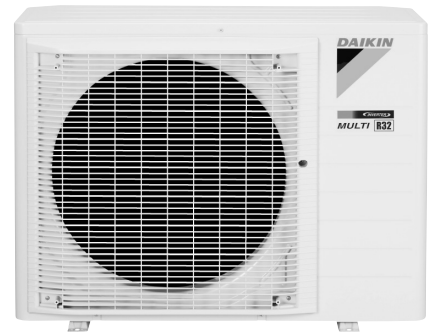
REMOVAL PROCEDURE



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

5.6/6.2/6.5/7.5/8.0/9.0 kW Class 24000/28000 Btu/h Class

-  Outdoor Unit
-  Inverter / Hybrid
-  Multi Type



Service Manual Removal Procedure

Outdoor Unit

●Cooling Only

**MKM24PV2S
MKM28PV2S**

**MKM65PV14
MKM80PV14**

**MKM65PV1G
MKM80PV1G**

MV62PV1G

●Heat Pump

**2MXM56PVLT
2MXM75PVLT**

3MXM90PVLT

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Note:

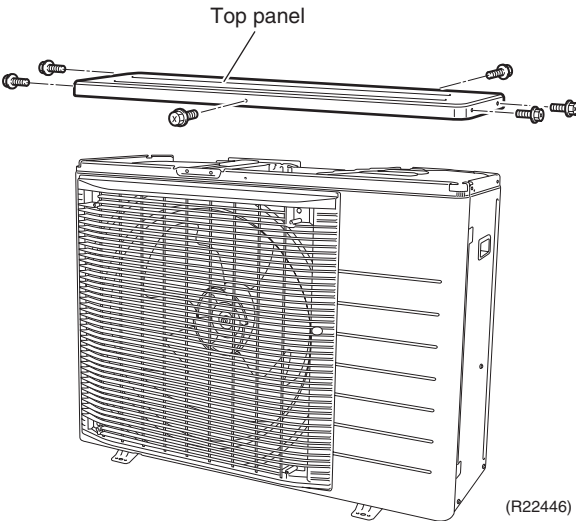
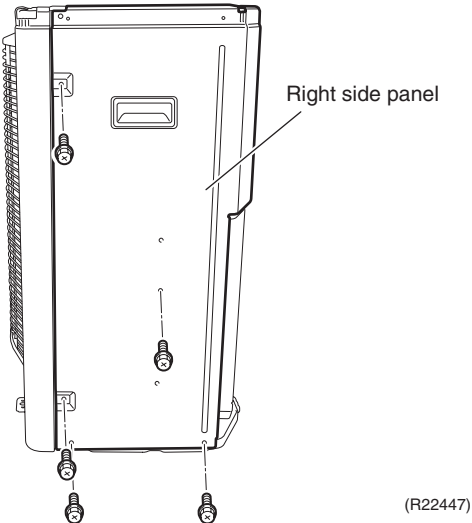
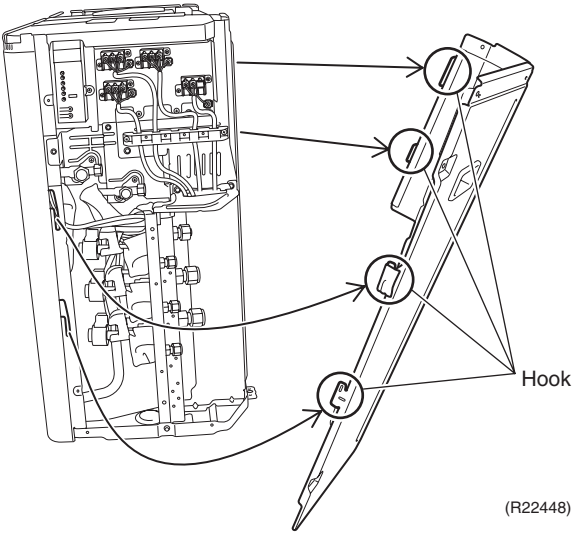
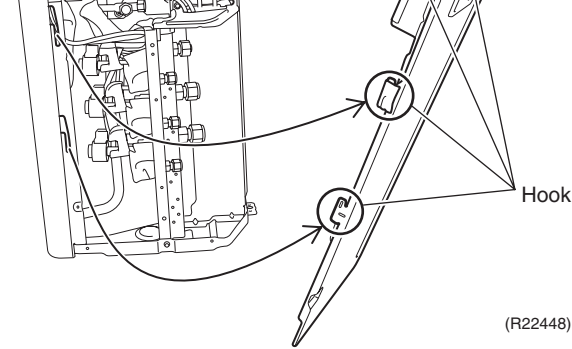
- ◆ The illustrations may be slightly different depending on the model.
- ◆ The illustrations are for heat pump models as representative.

1. Outer Panels

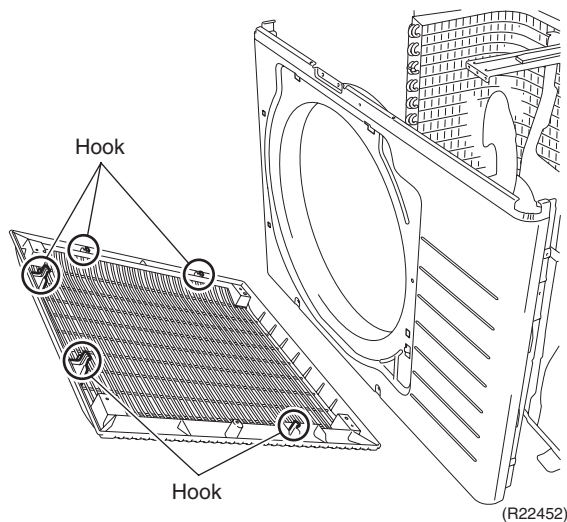
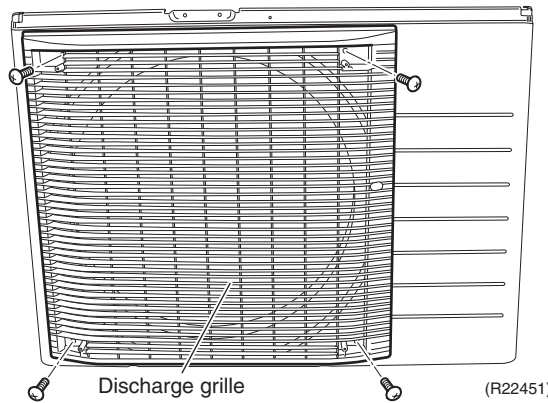
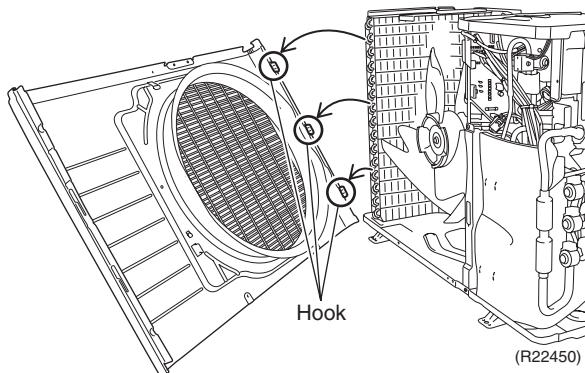
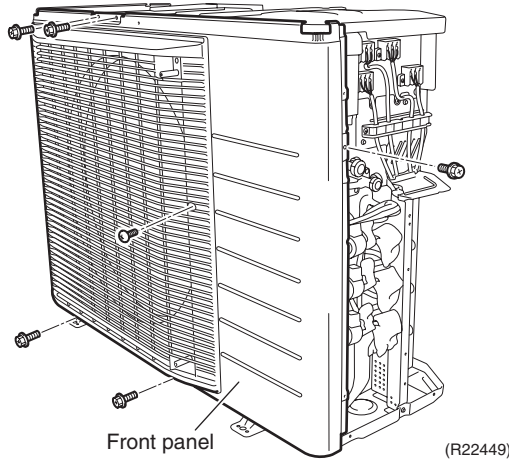


Warning

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

Step	Procedure	Points	
1	Remove the 6 screws and remove the top panel.		
2	Remove the 5 screws of the right side panel.		<p>■ The right side panel can be removed without removing the top panel.</p>
3	Slide the right side panel downward to unfasten the 2 hooks on the left of the right side panel.		<p>■ When reassembling, make sure that the 4 hooks are securely fastened.</p>
4	Unfasten the 2 hooks at the back and remove the right side panel.		

Step	Procedure	Points
5	Remove the 6 screws of the front panel.	
6	Unfasten the 3 hooks on the left side.	<p>■ When reassembling, make sure that the 3 hooks are securely fastened.</p>
7	Remove the front panel.	
8	Remove the 4 screws of the discharge grille.	
9	Unfasten the 5 hooks and remove the discharge grille.	

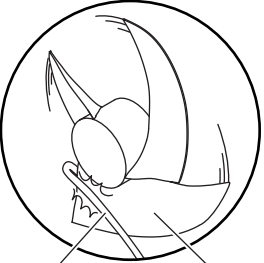


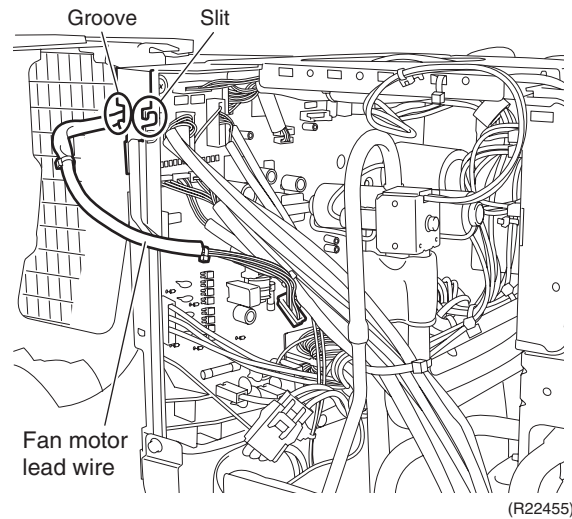
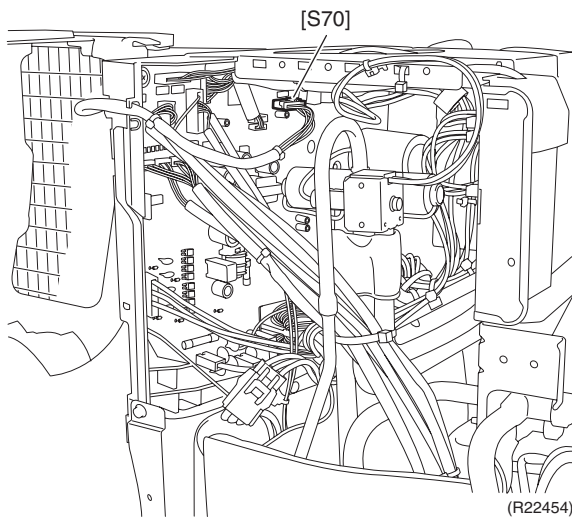
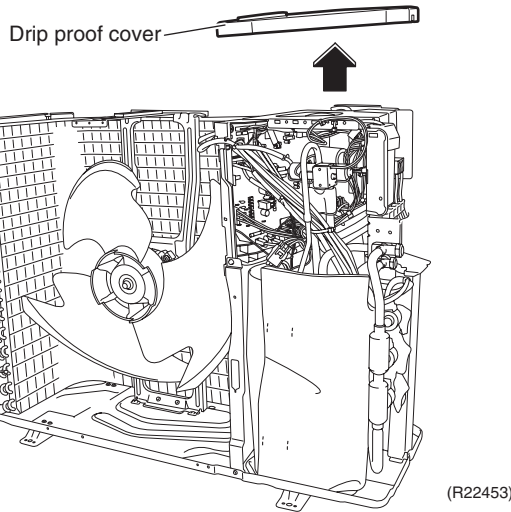
2. Outdoor Fan / Fan Motor

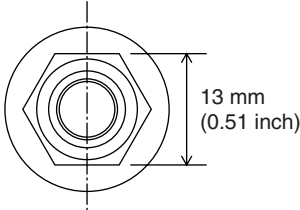
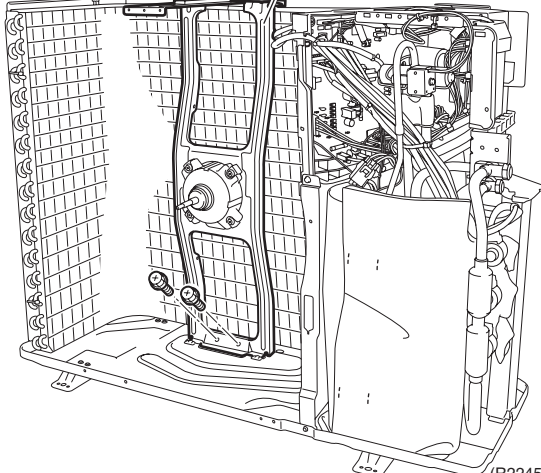
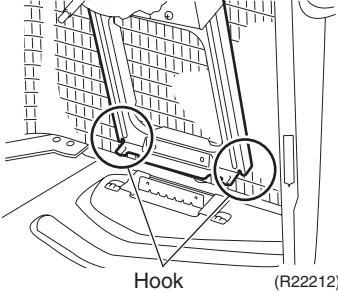
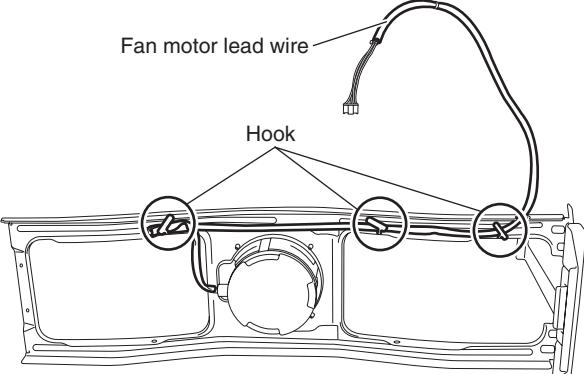
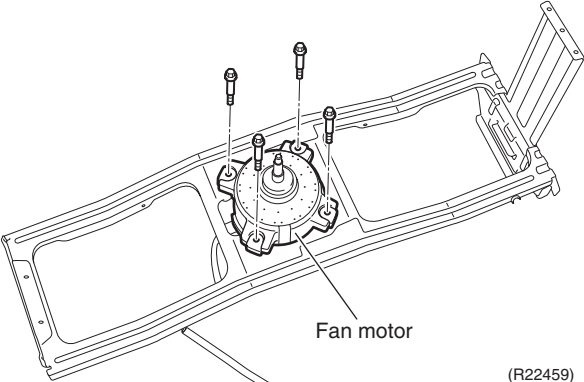


Warning

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

Step	Procedure	Points
1	Remove the drip proof cover.	
2	Disconnect the connector [S70].	<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 slit and the groove.	 <p>Lead wire Outdoor fan</p> <p>(R3249)</p>



Step	Procedure	Points
4	Remove the nut and remove the outdoor fan.	<p>■ Nut size : M8</p>  <p>(R18965)</p> <p>■ When reassembling, align the ▼ mark of the fan rotor with the D-cut section of the motor shaft.</p>
5	Remove the 2 screws and remove the fan motor fixing frame.	<p>■ When reassembling, fit the 2 lower hooks into the bottom frame.</p>   <p>(R22457)</p> <p>(R22212)</p>
6	Unfasten the 3 hooks on the fan motor fixing frame and release the fan motor lead wire.	 <p>(R22458)</p>
7	Remove the 4 screws and remove the fan motor.	 <p>(R22459)</p>

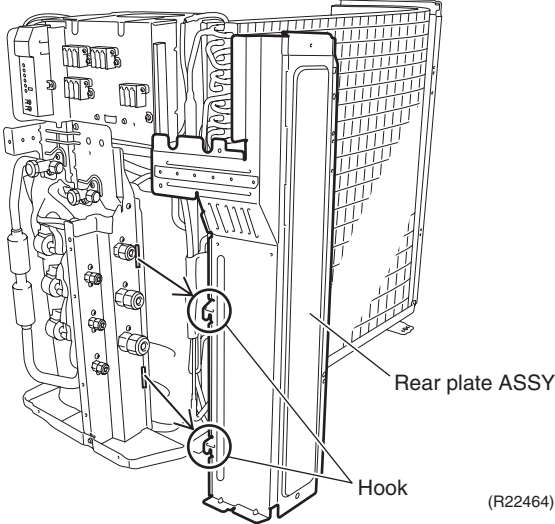
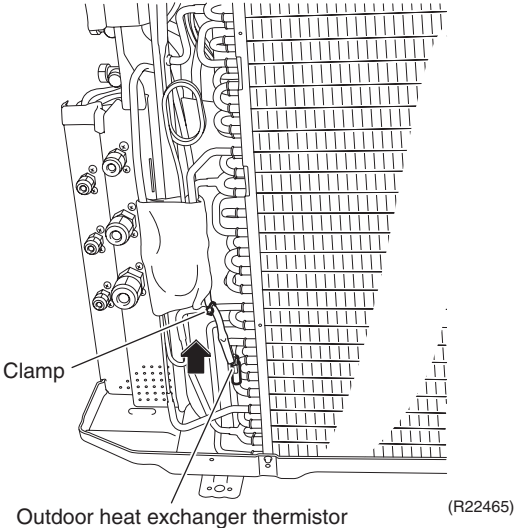
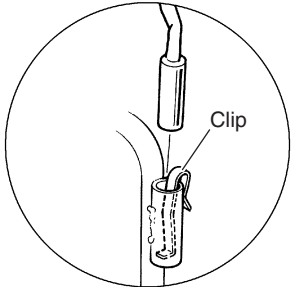
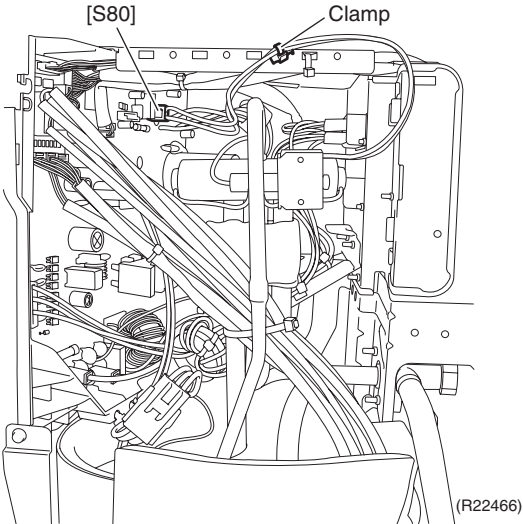
3. Rear Plate ASSY / Electrical Box



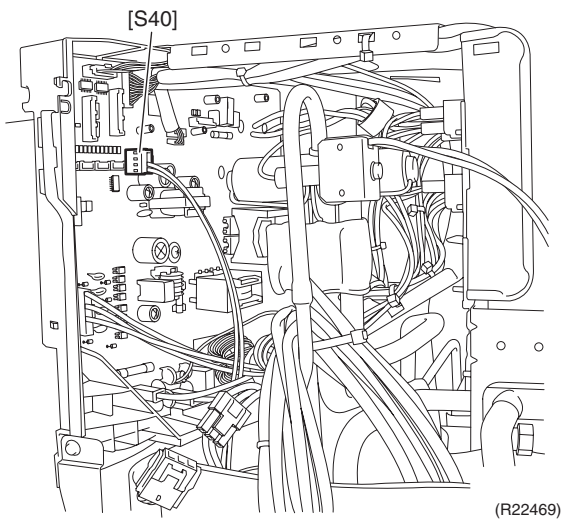
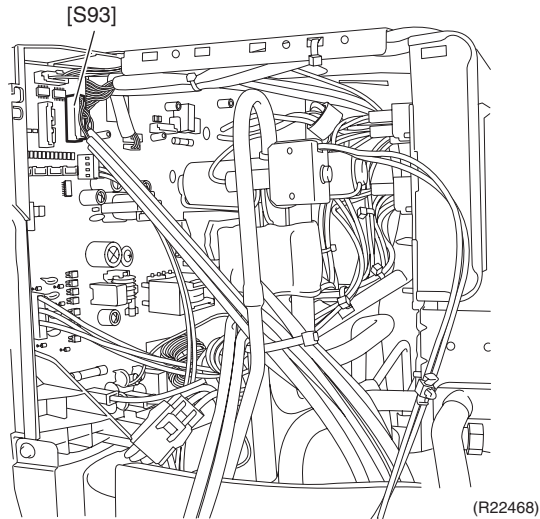
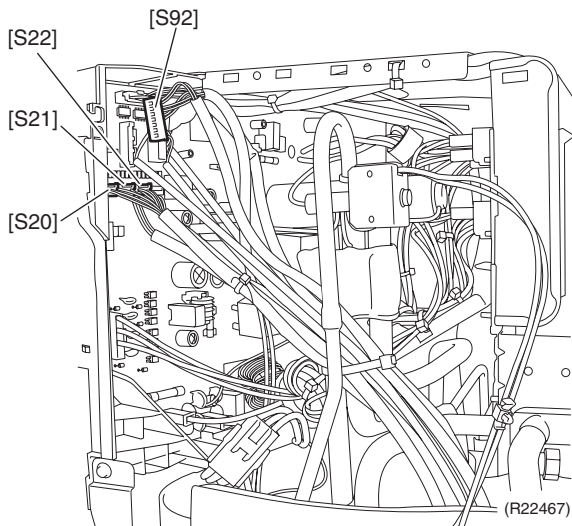
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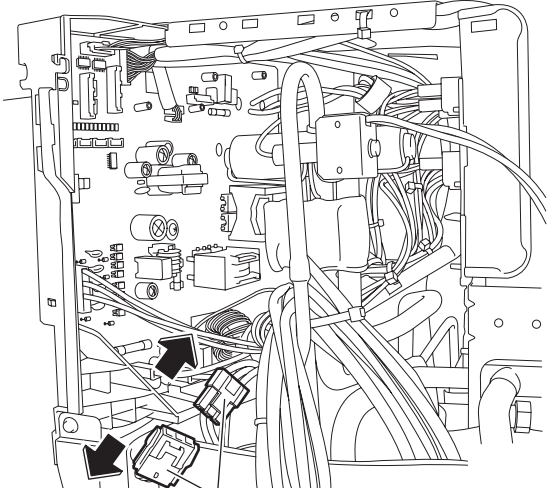
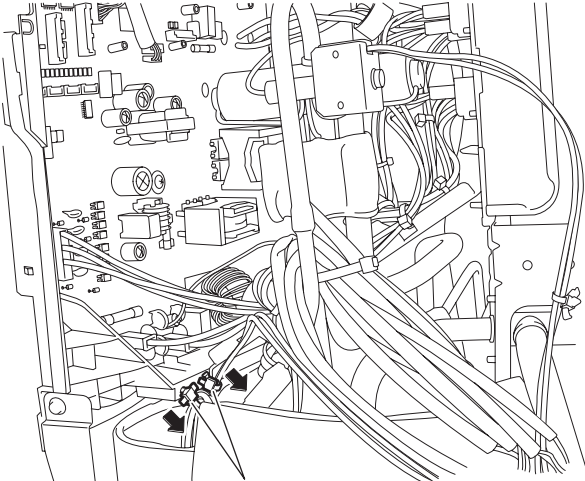
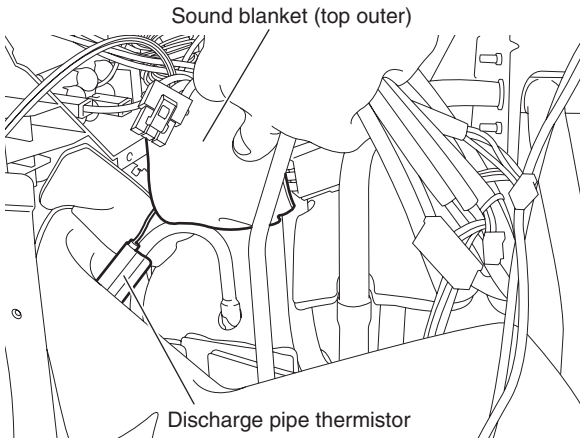
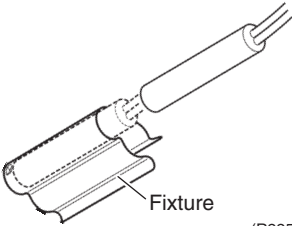
- ◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

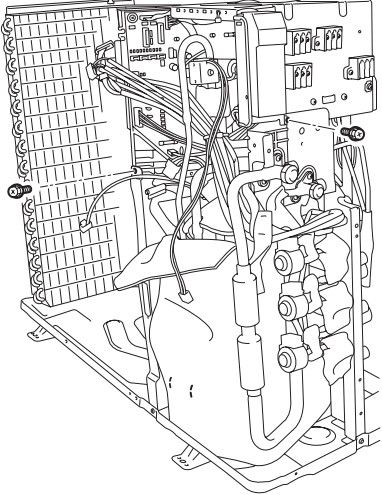
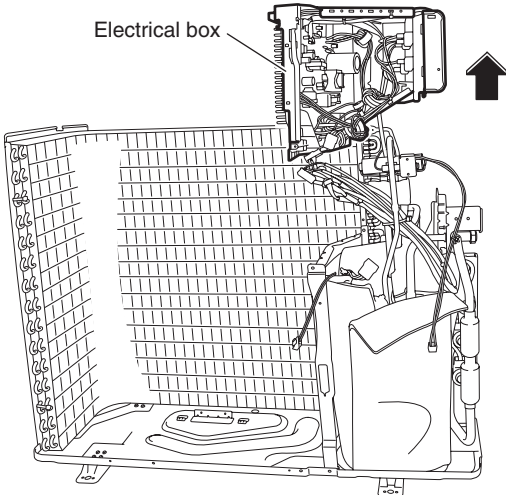
Step	Procedure	Points
1. Remove the rear plate ASSY.		<ul style="list-style-type: none"> ■ The number of the terminal boards varies depending on the models.
1 Remove the 15 screws on the 4 terminal boards and disconnect the 3 connecting wires (Room A, B, C) and power supply wire.	<p style="text-align: right;">(R22460)</p>	
2 Remove the 2 screws and remove the wire fixture together with the 3 connecting wires (Room A, B, C) and power supply wire.		
3 Remove the 2 screws.		<ul style="list-style-type: none"> ■ When reassembling, make sure that the 2 hooks are securely fastened.
4 Tilt the partition plate (2) upward and pull forward to unfasten the 2 hooks and remove it.	<p style="text-align: right;">(R22461)</p>	<p style="text-align: right;">Hook (R22462)</p>
5 Release the outdoor temperature thermistor from the slit.		
6 Remove the 5 screws of the rear plate ASSY.	<p style="text-align: right;">(R22463)</p>	

Step	Procedure	Points
7	Unfasten the 2 hooks and remove the rear plate ASSY.	<ul style="list-style-type: none"> When reassembling, make sure that the 2 hooks are securely fastened.
		
2. Remove the electrical box.	<p data-bbox="153 846 169 869">1</p> <p data-bbox="197 846 448 940">Cut the clamp and pull out the outdoor heat exchanger thermistor.</p> 	<ul style="list-style-type: none"> Be careful not to lose the clip for the thermistor.
2	Disconnect the connector [S80] and pull out the clamp.	 <ul style="list-style-type: none"> When reassembling, insert the thermistor harness through the heat exchanger pipes. <p data-bbox="1094 1391 1331 1420">[S80]: four way valve</p> <ul style="list-style-type: none"> Cooling only models have no harness for [S80].
		

Step	Procedure	Points
3	Disconnect the connector [S92] and 3 connectors for electronic expansion valve coil.	<p>[S20] (white): room A [S21] (red): room B [S22] (blue): room C [S92]: gas pipe thermistor</p> <ul style="list-style-type: none"> ■ The 2-room models do not have [S22]. ■ The 4-room models have [S23] (yellow) for room D.
4	Disconnect the connector [S93].	<p>[S93]: liquid pipe thermistor</p>
5	Disconnect the connector [S40].	<p>[S40]: overload protector</p> <ul style="list-style-type: none"> ■ When reassembling, connect the connectors in the reverse order.



Step	Procedure	Points
6	Disconnect the relay connector for compressor.	
	 <p style="text-align: center;">Relay connector (R22470)</p>	
7	Pull out the 2 clamps.	
	 <p style="text-align: center;">Clamp (R22471)</p>	
8	Open the sound blanket (top outer) and detach the discharge pipe thermistor.	
	 <p style="text-align: center;">Sound blanket (top outer)</p> <p style="text-align: center;">Discharge pipe thermistor (R22472)</p>	<p>■ Be careful not to lose the fixture for the thermistor.</p>  <p style="text-align: center;">Fixture (R22559)</p>

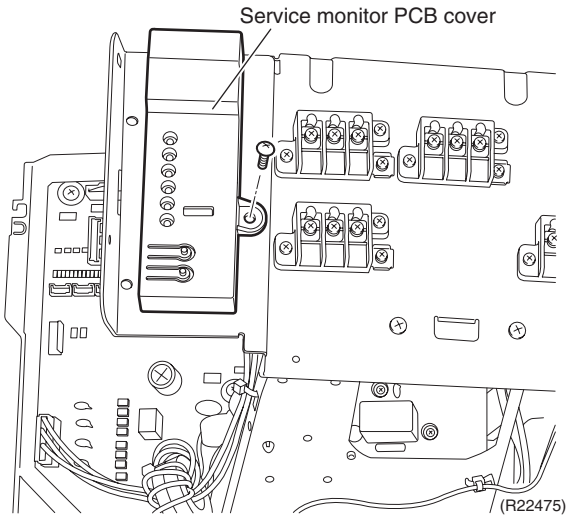
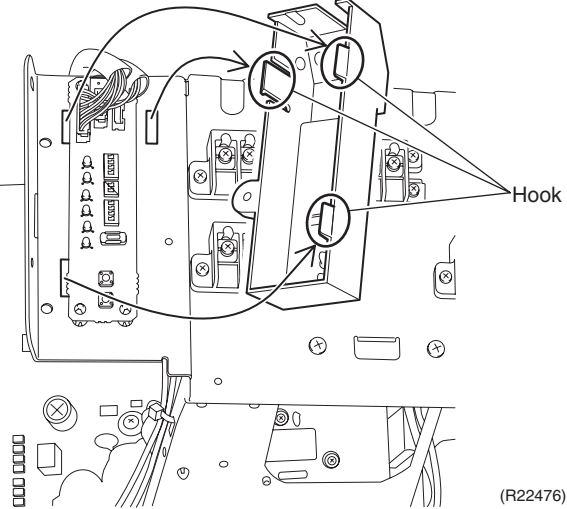
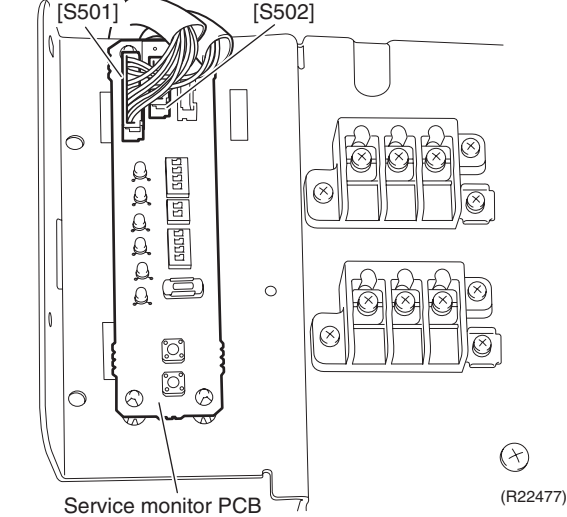
Step		Procedure	Points
9	Remove the 2 screws.	 <p>(R22473)</p>	
10	Remove the electrical box.	 <p>(R22474)</p>	

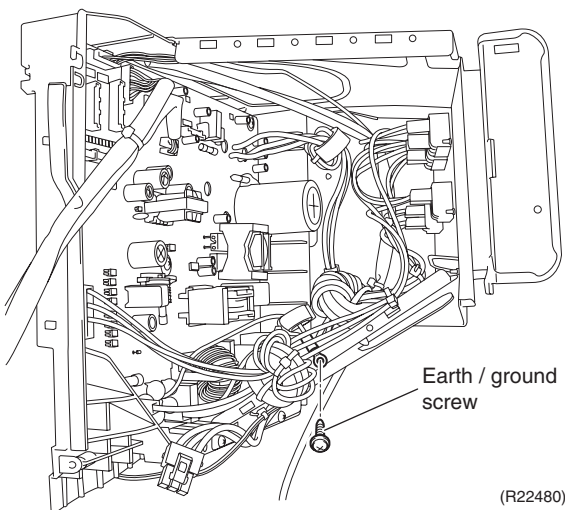
4. PCBs

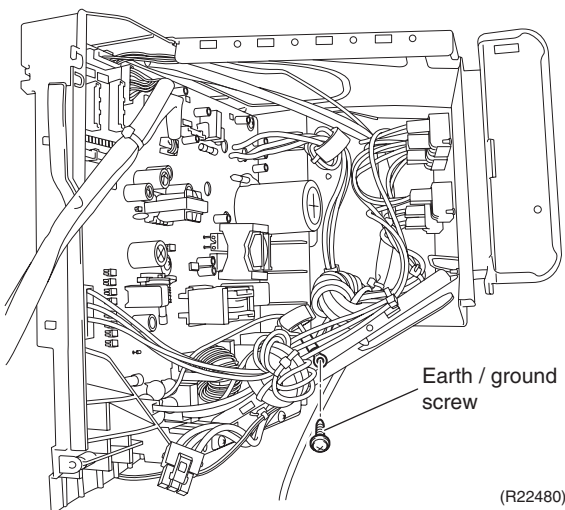
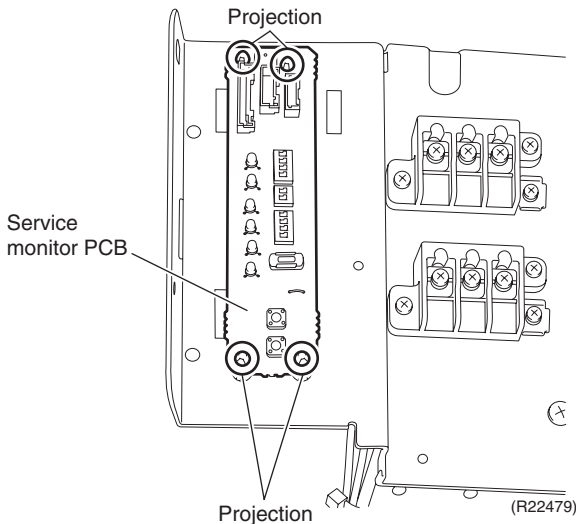
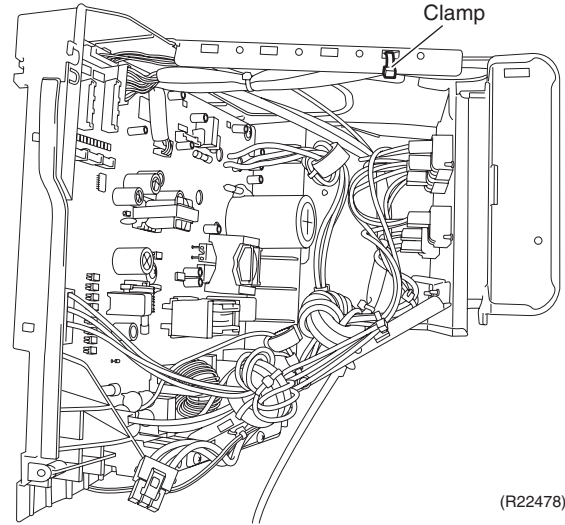


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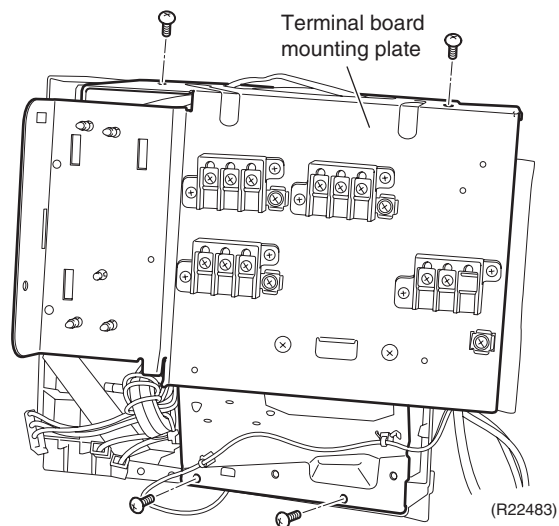
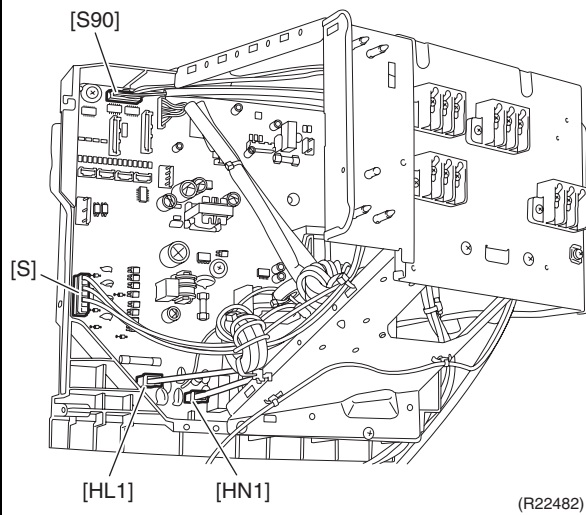
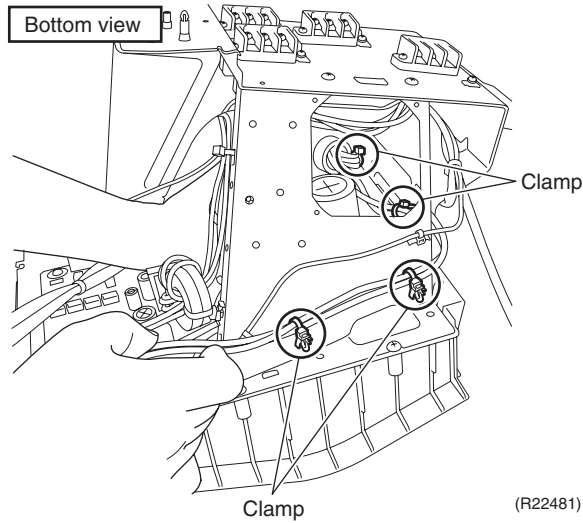
- ◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1. Remove the service monitor PCB.	 <p>Service monitor PCB cover</p> <p>(R22475)</p>	
1 Remove the screw of the service monitor PCB cover.		
2 Unfasten the 3 hooks and remove the service monitor PCB cover.	 <p>Hook</p> <p>(R22476)</p>	<ul style="list-style-type: none"> ■ When reassembling, make sure that the 3 hooks are securely fastened.
3 Disconnect the 2 connectors [S501] and [S502] from the service monitor PCB.	 <p>[S501] [S502]</p> <p>Service monitor PCB</p> <p>(R22477)</p>	<p>[S501], [S502]: to main PCB</p>

Step	Procedure	Points
4	Cut the clamp.	(R22478)
5	Unfasten the 4 projections and remove the service monitor PCB.	(R22479)
2. Remove the terminal board mounting plate.	 <p>Earth / ground screw</p> <p>(R22480)</p>	(R22480)
1	Remove the earth / ground screw.	(R22480)



Step	Procedure	Points
2	Pull out the 4 clamps.	
3	Disconnect the connector [S90] and the 3 terminals for power supply.	[S90]: thermistors [HL1], [HN1], [S]: to terminal board
4	Remove the 4 screws of the terminal board mounting plate.	



Step	Procedure	Points
5	Slide the terminal board mounting plate up to unfasten the hook and remove it.	<ul style="list-style-type: none"> When reassembling, make sure to fasten the hook with the notch.
3. Remove the main PCB.		
1	Remove the 9 screws.	
2	Unfasten the 3 hooks and remove the main PCB.	

5. Partition Plate / Sound Blankets

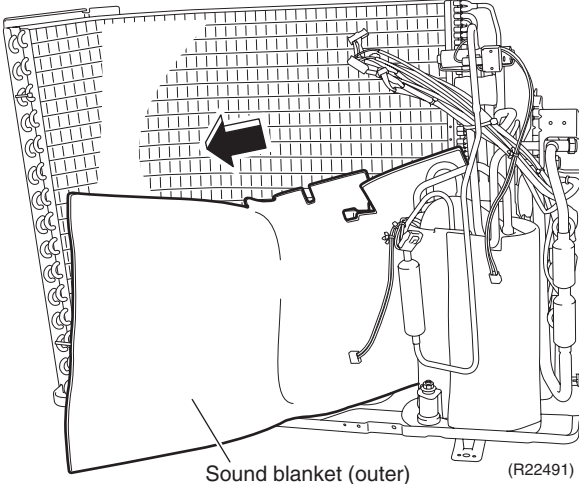


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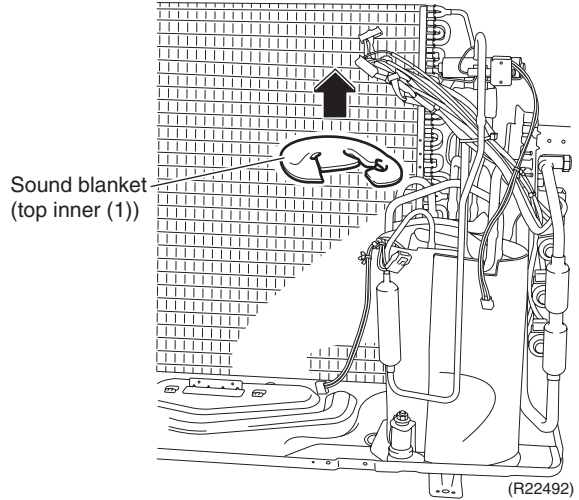
♦ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
<p>1. Remove the partition plate.</p> <p>1 Remove the 2 screws.</p> <p>2 Lift up the partition plate and remove it.</p>		<p>■ When reassembling, fit the lower hook into the bottom frame.</p>
<p>2. Remove the sound blankets.</p> <p>1 Remove the sound blanket (top outer).</p> <p>2 Release the 2 Velcro tapes (front) and the Velcro tape (right) on sound blanket (outer).</p>	 	

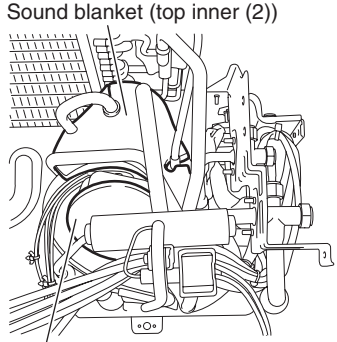
Step	Procedure	Points
3	Remove the sound blanket (outer).	<ul style="list-style-type: none"> Since the piping ports are torn easily, remove the sound blanket carefully.
4	Remove the sound blanket (top inner (1)).	<ul style="list-style-type: none"> When reassembling, put the sound blanket (top inner (1)) and sound blanket (top inner (2)) as the position below.
5	Remove the sound blanket (top inner (2)).	<ul style="list-style-type: none"> Some models do not have the sound blanket (top inner (2)).



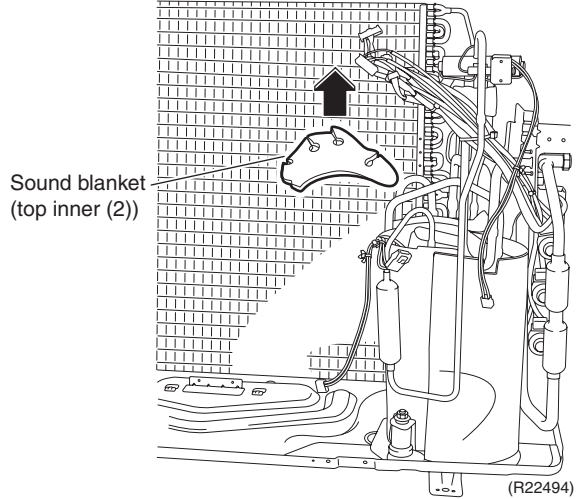
Sound blanket (outer) (R22491)



Sound blanket (top inner (1))



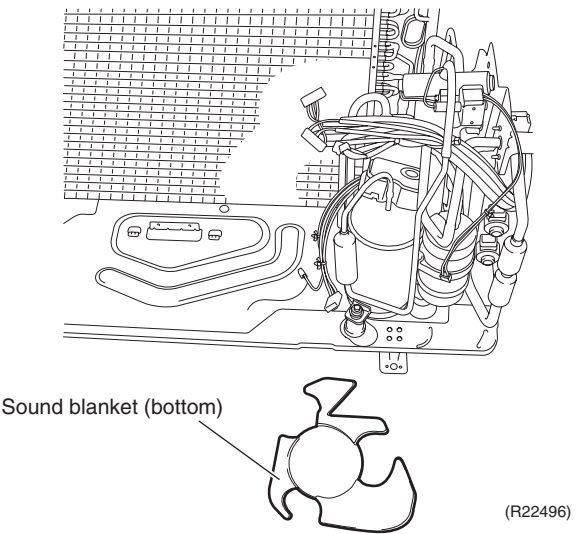
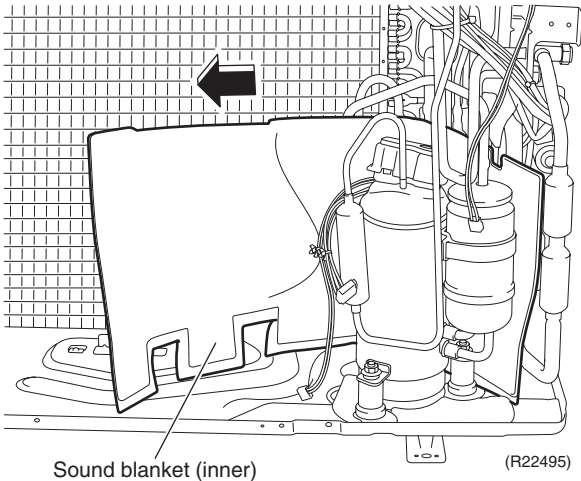
Sound blanket (top inner (1)) (R22493)



Sound blanket (top inner (2))

(R22494)

Step	Procedure	Points
6	Remove the sound blanket (inner).	
7	Remove the sound blanket (bottom).	<ul style="list-style-type: none"> Some models do not have the sound blanket (bottom).



6. Electronic Expansion Valve Coil ASSY / Thermistor ASSYs



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.



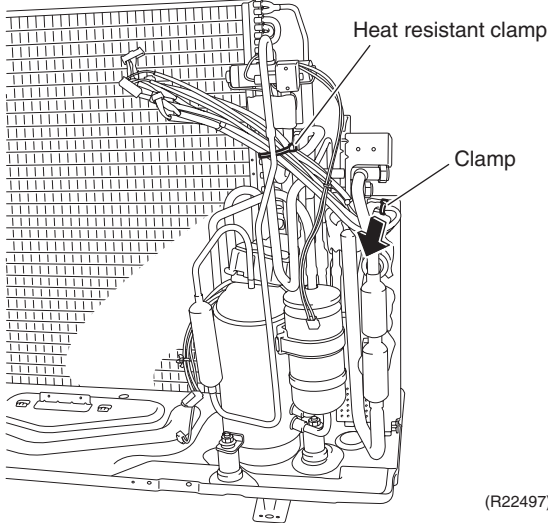
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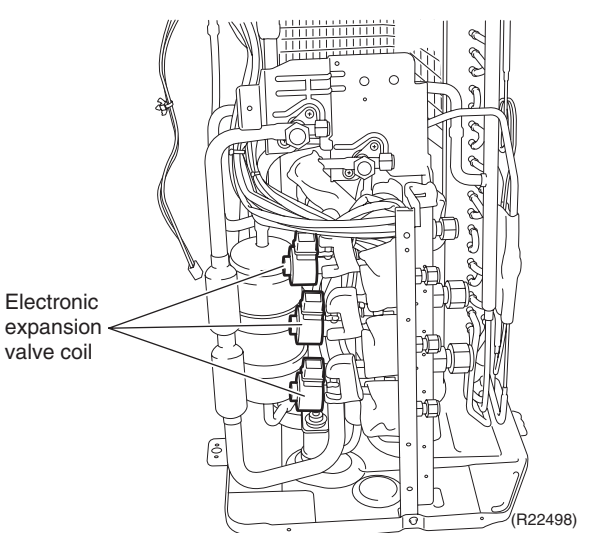
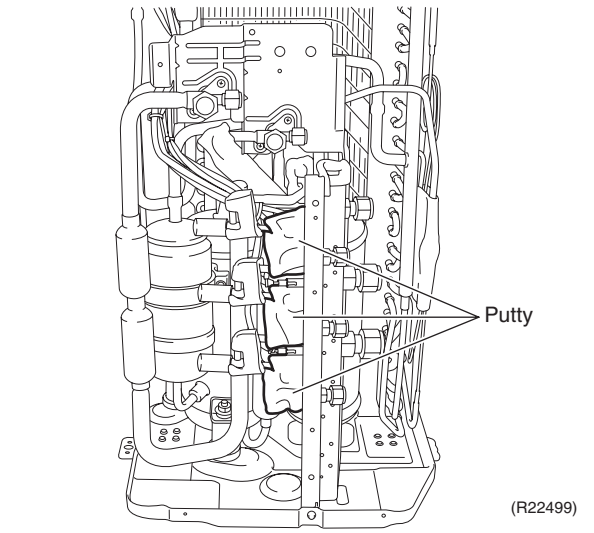
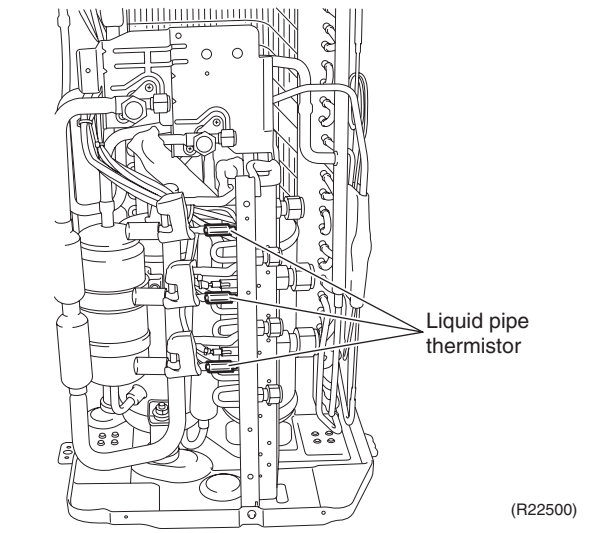
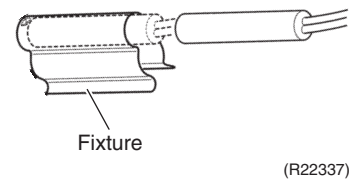
- ◆ From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.
- ◆ Restore the piping by non-oxidation brazing.

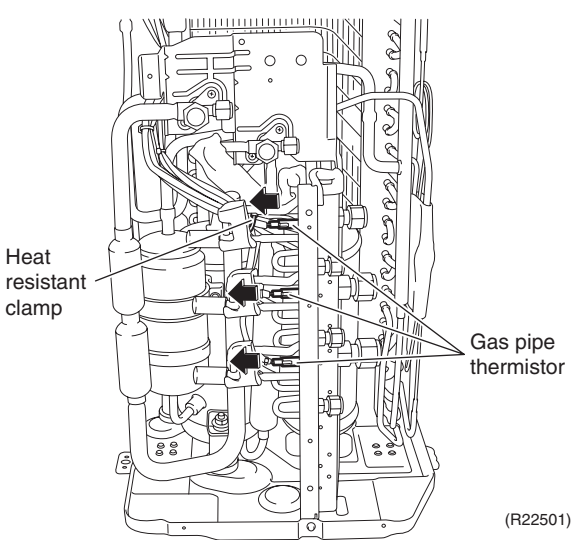
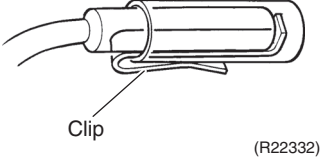


Note

- ◆ 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 electronic expansion valve coil ASSY.		
1 Cut the heat resistant clamp and pull out the clamp.		

Step	Procedure	Points
2	Pull out the electronic expansion valve coils.	<ul style="list-style-type: none"> ■ The number of the electronic expansion valve coils varies depending on the models.
3	Remove the electronic expansion valve coil ASSY.	
 <p>Electronic expansion valve coil</p> <p>(R22498)</p>		
<p>2. Remove the liquid pipe thermistor ASSY.</p>		
1	Remove the sheets of putty.	 <p>Putty</p> <p>(R22499)</p>
2	Pull out the liquid pipe thermistors.	<ul style="list-style-type: none"> ■ Be careful not to lose the fixture for the thermistor.
3	Remove the liquid pipe thermistor ASSY.	 <p>Liquid pipe thermistor</p> <p>(R22500)</p>
 <p>Fixture</p> <p>(R22337)</p>		

Step	Procedure	Points
3. Remove the gas pipe thermistor ASSY.	 <p>Heat resistant clamp</p> <p>Gas pipe thermistor</p> <p>(R22501)</p>	<ul style="list-style-type: none"> ■ The number of the gas pipe thermistors varies depending on the models. ■ Be careful not to lose the clip of the thermistor.  <p>Clip</p> <p>(R22332)</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

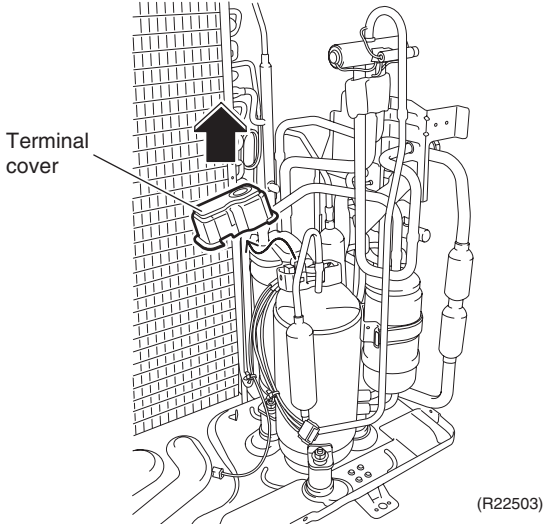
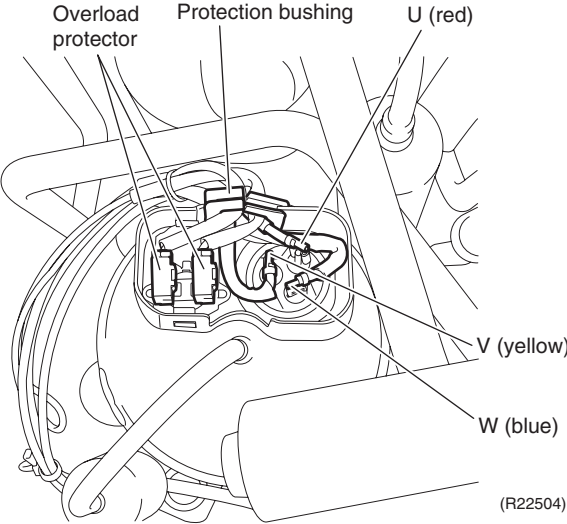
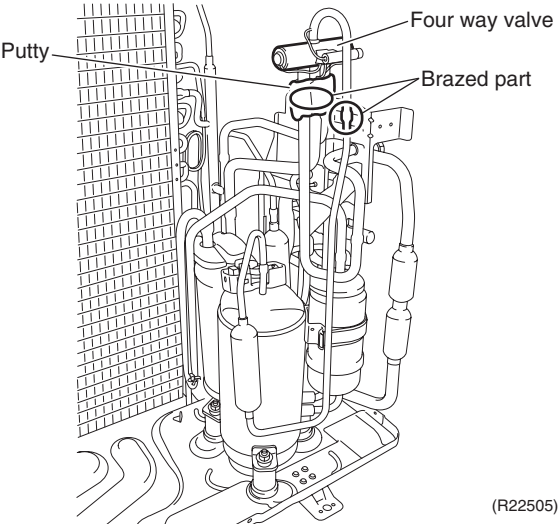
- ◆ From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.
- ◆ Cautions for restoration
 1. Restore the piping by non-oxidation brazing.
 2. It is required to prevent the carbonization of the oil inside 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 screw and remove the four way valve coil.	<div data-bbox="517 1339 1027 1868" data-label="Image"> </div> <div data-bbox="995 1839 1062 1861">(R22502)</div> <ul style="list-style-type: none"> ■ When reassembling, make sure that the four way valve is not inclined. ■ The cooling only models have no four way valve.

Step	Procedure	Points
2	Remove the terminal cover.	 <p>Terminal cover</p> <p>(R22503)</p>
3	Remove the protection bushing.	 <p>Overload protector</p> <p>Protection bushing</p> <p>U (red)</p> <p>V (yellow)</p> <p>W (blue)</p> <p>(R22504)</p>
4	Disconnect the compressor lead wires and the overload protector.	
5	Remove the putty.	 <p>Putty</p> <p>Four way valve</p> <p>Brazed part</p> <p>(R22505)</p>
6	Heat up the 4 brazed parts and 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.



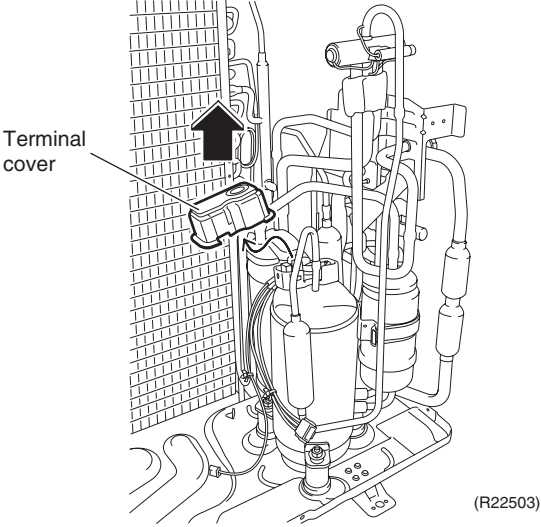
Caution

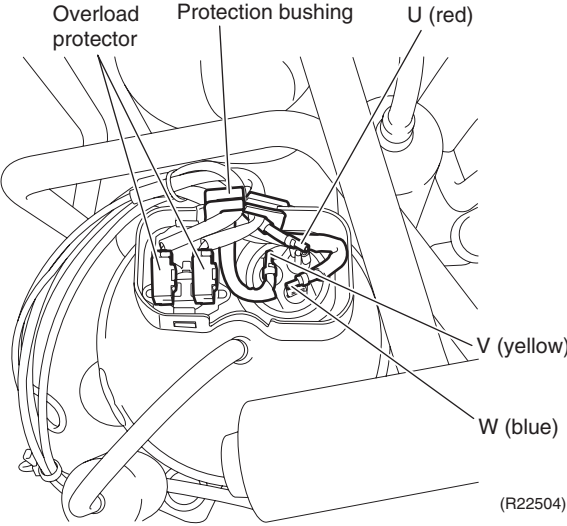
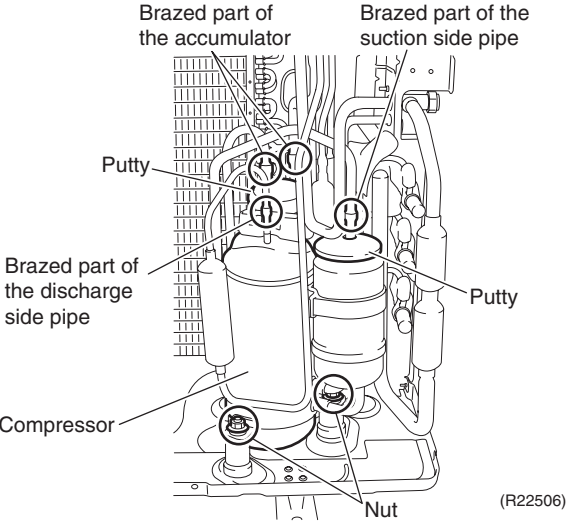
- ◆ From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.
- ◆ Restore the piping by non-oxidation brazing.



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 style="text-align: right;">(R22503)</p>

Step	Procedure	Points	Points	
2	Remove the protection bushing.			
3	Disconnect the compressor lead wires and the overload protector.			
4	Remove the 2 sheets of putty.			8
5	Heat up the brazed part of the discharge side pipe and disconnect it.	9		Lift up the compressor and remove it.
6	Heat up the brazed part of the suction side pipe and disconnect it.			
7	Heat up the brazed part of the accumulator and disconnect it.			

Revision History

Month / Year	Version	Revised contents
10 / 2015	Si121561E	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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