



REMOVAL PROCEDURE



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

4.0/4.5/5.0/6.0 kW Class 18000 Btu/h Class

-  Outdoor Unit
-  Inverter
-  Pair Type



Service Manual

Removal Procedure

Outdoor Unit

●Cooling Only

RKS18JV2S

RKS40MVLT
RKS50MVLT

RKS50J2V1B9
RKS60F3V1B9

RKS50GVM4
RKS60GVM4

RKS50GVMV
RKS60GVMV

RKS50HVM
RKS60HVM

RKS50JAVLT
RKS60JAVLT

RKS50JVMG
RKS60JVMG

●Heat Pump

RXS40MVLT
RXS50MVLT

RXS45LAVMA

RXS50JAVLT
RXS60JAVLT

ARXS50G3V1B
RX50G2V1B9
RX60G2V1B9
RX50G3V1B
RX60G3V1B

RXG50K3V1B
RXG50L2V1B

RXS50J2V1B9
RXS50K2V1B
RXS60F3V1B9
RXS60F4V1B

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Note:

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

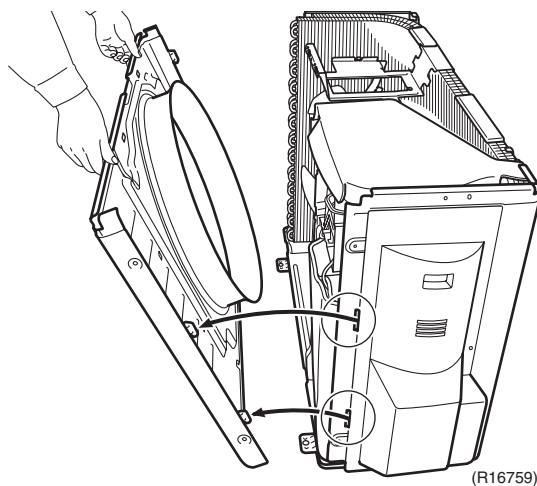
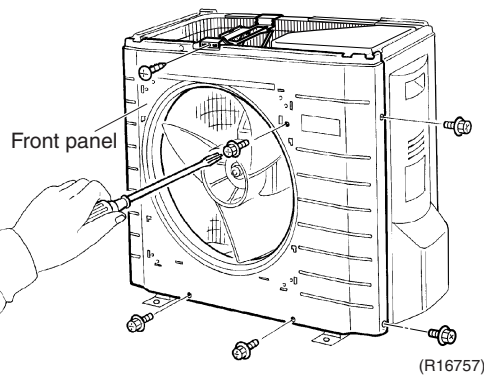
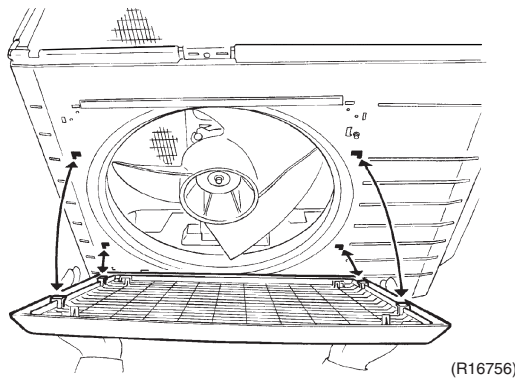
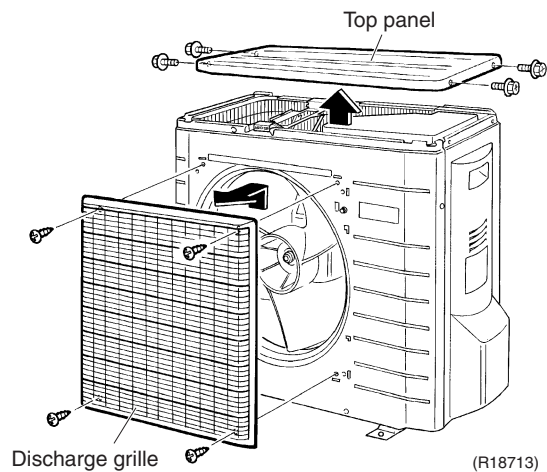
1. Outer Panels



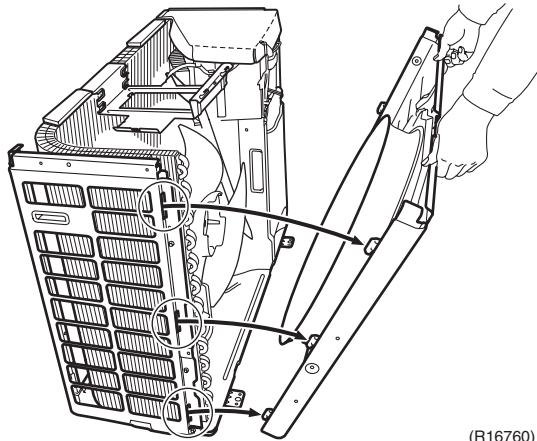
Warning

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

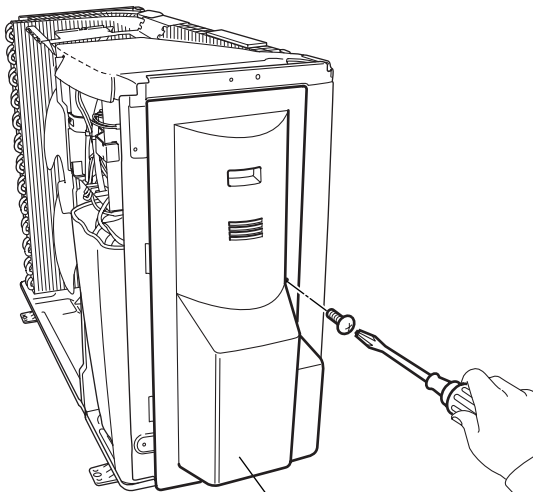
Step	Procedure	Points
1	Remove the 4 screws and remove the top panel.	<ul style="list-style-type: none"> ■ Take care not to cut your finger by the fins of the outdoor heat exchanger.
2	Remove the 4 screws and remove the discharge grille.	<ul style="list-style-type: none"> ■ Slide the discharge grille upward and remove it.
3	Remove the 6 screws of the front panel.	<ul style="list-style-type: none"> ■ The discharge grille has 4 hooks. ■ Some models have only 2 hooks.
4	Unfasten the 2 right side hooks.	



Step	Procedure	Points
5	Unfasten the 3 left side hooks and remove the front panel.	<ul style="list-style-type: none"> When reassembling, fit the 3 left side hooks of the front panel first.
6	Remove the screw of the stop valve cover.	
7	Pull down the stop valve cover to unfasten the hooks and remove it.	<ul style="list-style-type: none"> The stop valve cover has 6 hooks.

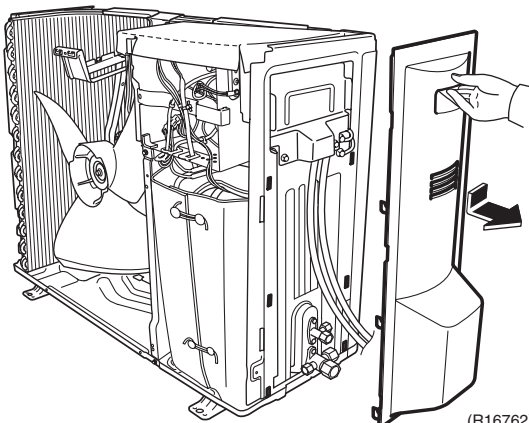


(R16760)

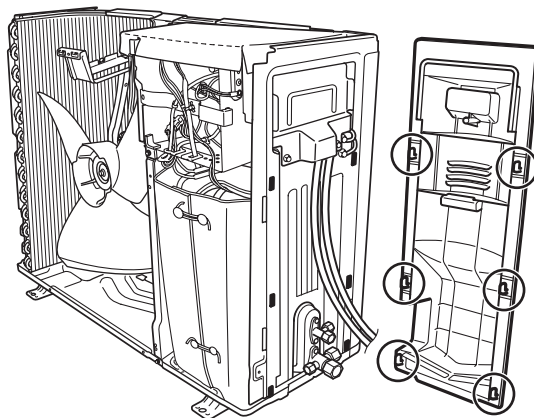


Stop valve cover

(R16761)



(R16762)



(R16763)

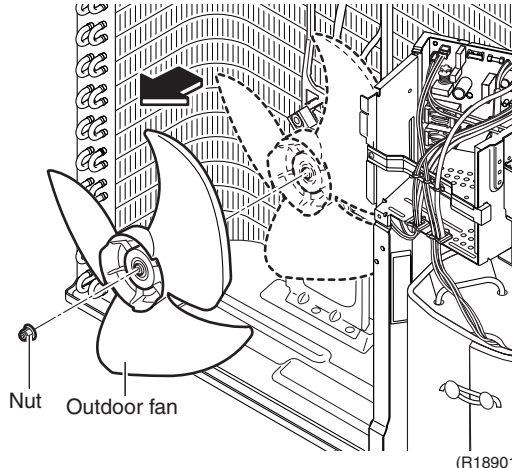
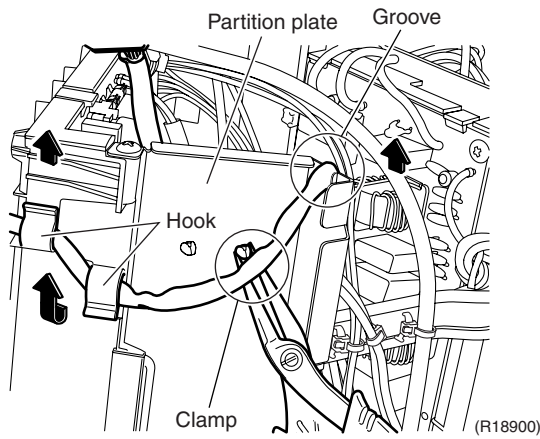
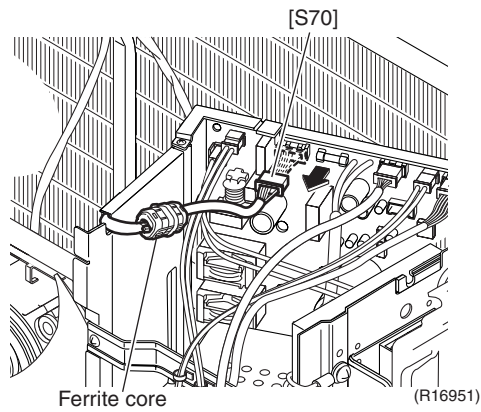
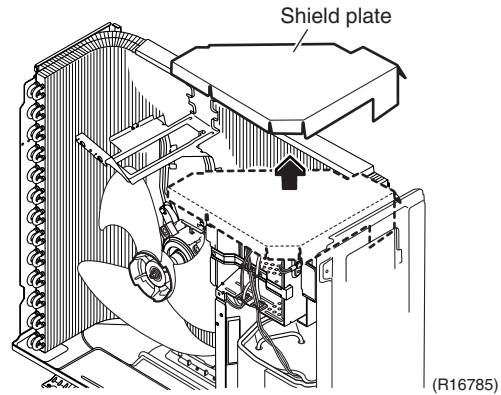
2. Outdoor Fan / Fan Motor

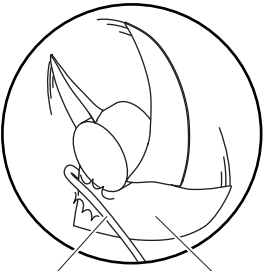


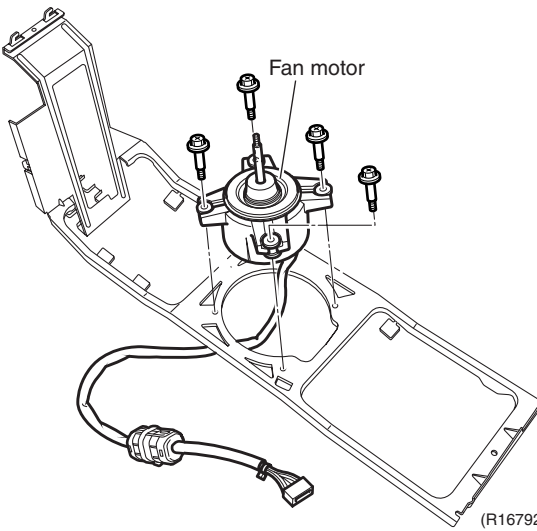
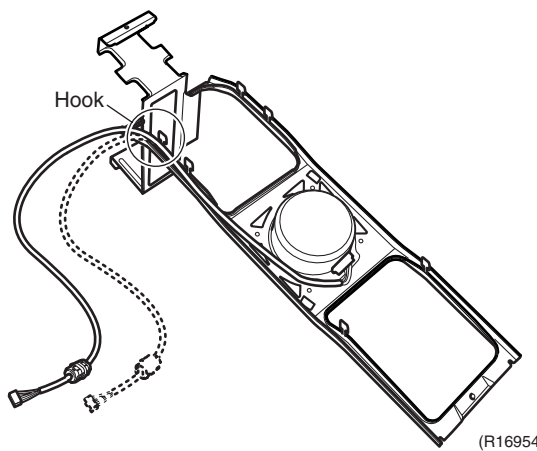
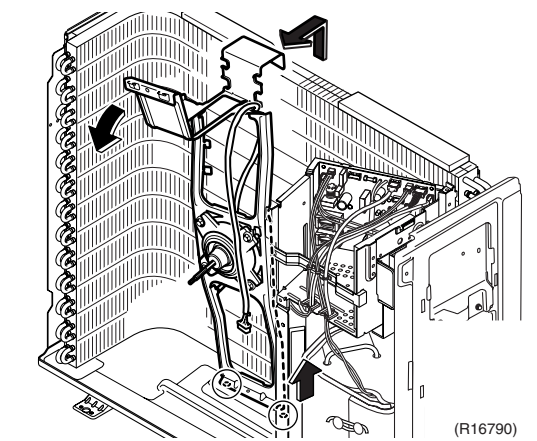
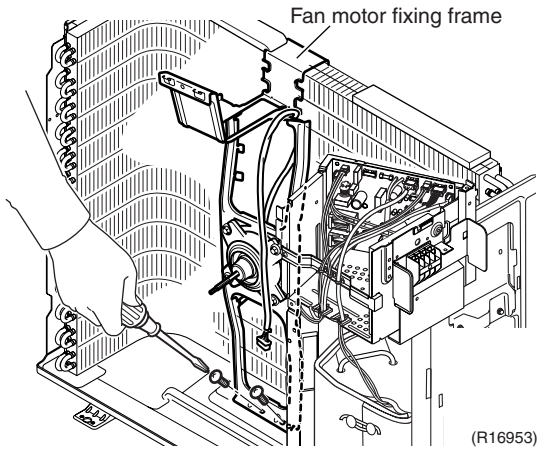
Warning

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Step	Procedure	Points
1	Remove the shield plate.	
2	Disconnect the connector [S70].	[S70] : fan motor
3	Release the clamp from the partition plate.	■ The ferrite core of the fan motor lead wire has a clamp.
4	Release the fan motor lead wire from the groove and the 2 hooks of the partition plate.	
5	Remove the nut and remove the outdoor fan.	■ Nut size: M6
		<p>(R18954)</p>
		<p>■ When reassembling, align the ▼ mark of the outdoor fan with the D-cut section of the motor shaft.</p>



Step	Procedure	Points
6	Remove the 2 screws of the fan motor fixing frame.	
7	Pull up the fan motor fixing frame to unfasten the 2 hooks at the bottom.	
8	Remove the fan motor fixing frame.	<ul style="list-style-type: none"> When reassembling, fit the lower 2 hooks into the bottom frame.
9	Open the hook and release the fan motor lead wire.	<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.
10	Remove the 4 screws and remove the fan motor.	 <p>Lead wire Outdoor fan</p> <p>(R3249)</p>

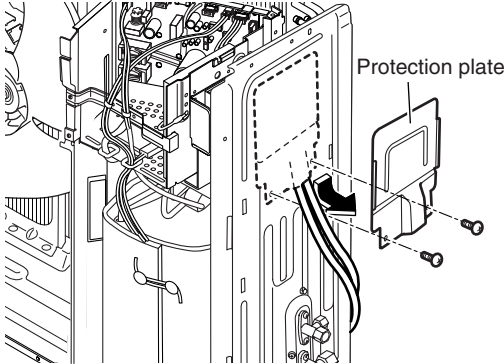
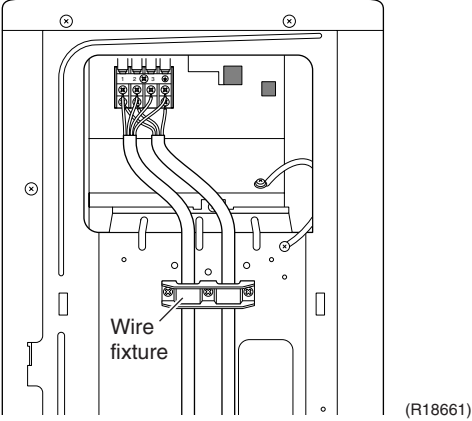
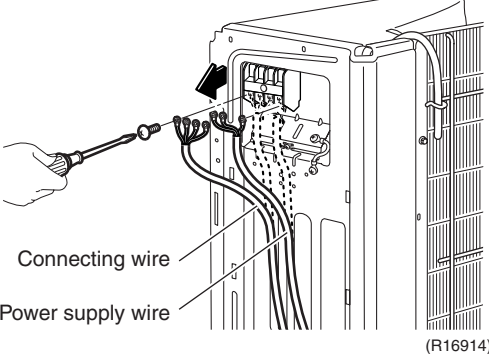
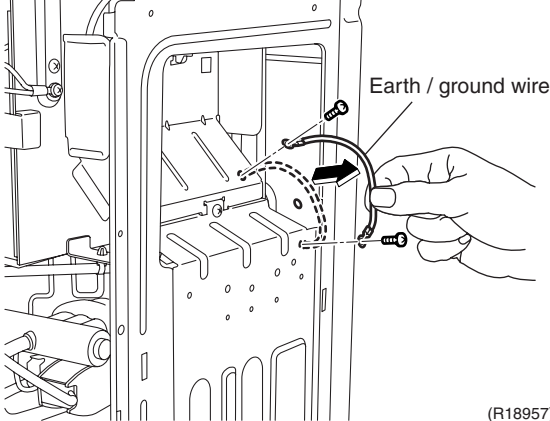


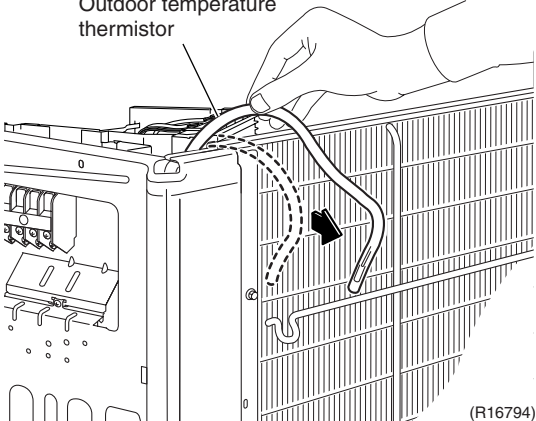
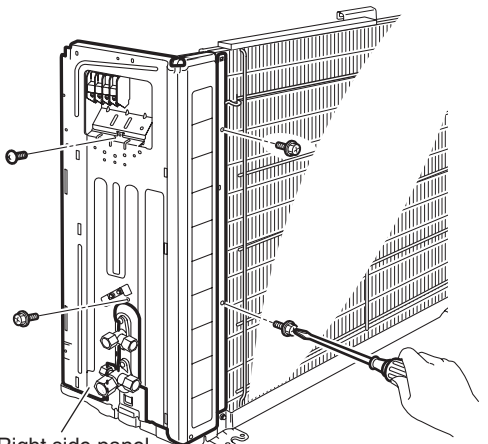
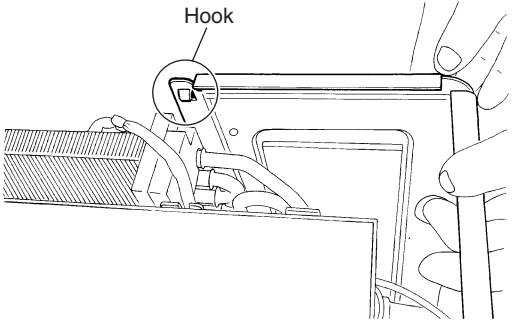
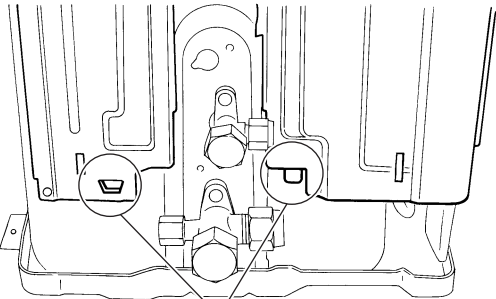
3. Electrical Box



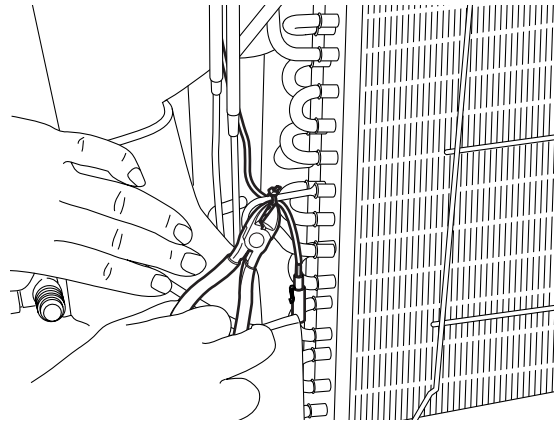
Warning

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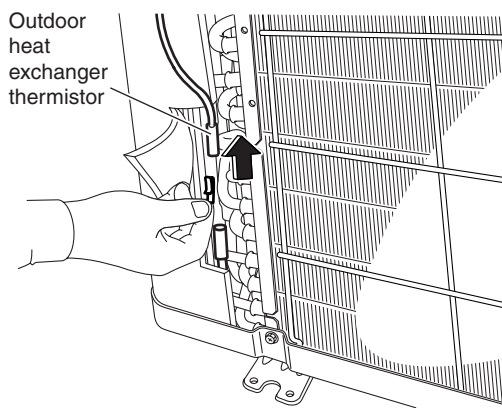
Step	Procedure	Points
1	Remove the 2 screws and remove the protection plate.	
2	Remove the 3 screws and remove the wire fixture.	
3	Remove the 7 screws and remove the connecting wire and the power supply wire.	
4	Remove the 2 screws and remove the earth / ground wire.	

Step		Procedure	Points
5	Pull out the outdoor temperature thermistor.	<p>Outdoor temperature thermistor</p>  <p>(R16794)</p>	
6	Remove the 4 screws of the right side panel.	 <p>Right side panel</p> <p>(R18903)</p>	
7	Unfasten the 3 hooks and remove the right side panel.	 <p>Hook</p> <p>(R16823)</p>  <p>Hook</p> <p>(R16824)</p>	<ul style="list-style-type: none"> ■ When reassembling, insert the upper hook and the 2 lower hooks back into place.

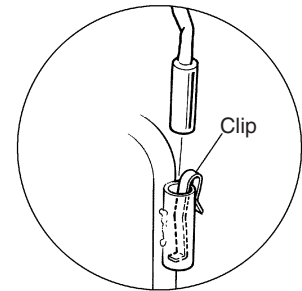
Step	Procedure	Points
8	Cut the clamp.	<ul style="list-style-type: none"> ■ The position of the clamp varies depending on the model.
9	Pull out the outdoor heat exchanger thermistor.	<ul style="list-style-type: none"> ■ The position of the outdoor heat exchanger thermistor varies depending on the model. ■ Be careful not to lose the clip for the thermistor.
10	Disconnect the connector [S70].	[S70]: fan motor
11	Release the clamp from the partition plate.	<ul style="list-style-type: none"> ■ The ferrite core of the fan motor lead wire has a clamp.
12	Release the fan motor lead wire from the groove and the 2 hooks of the partition plate.	



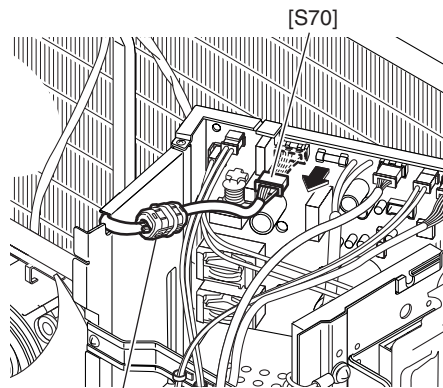
(R16766)



(R16819)

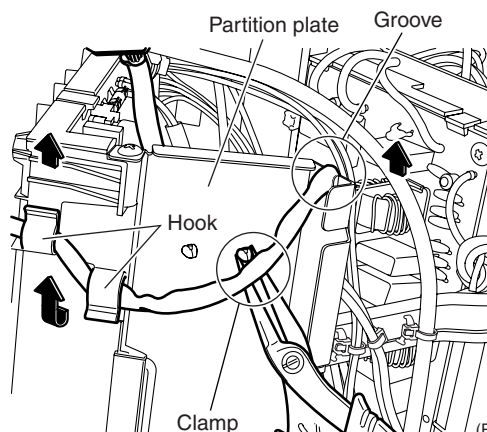


(R3264)



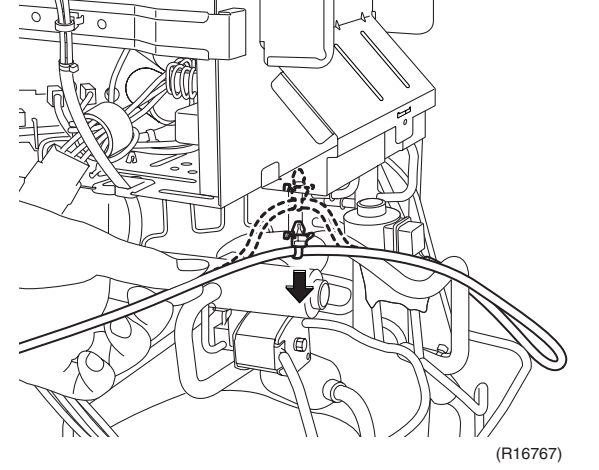
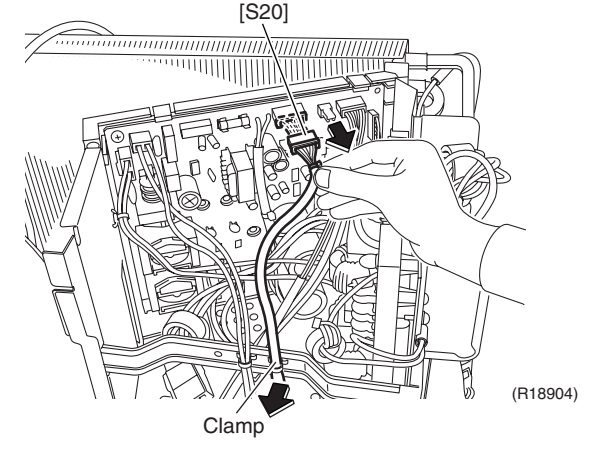
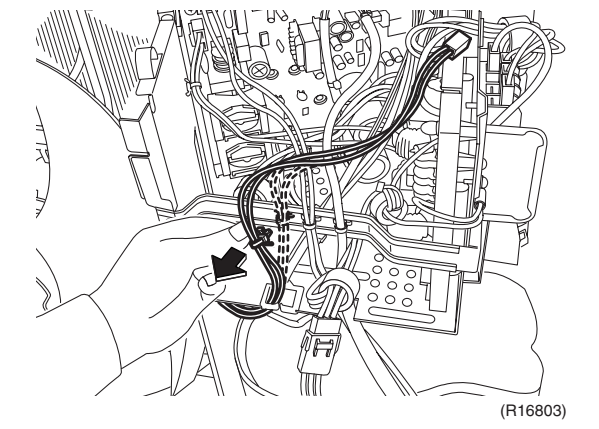
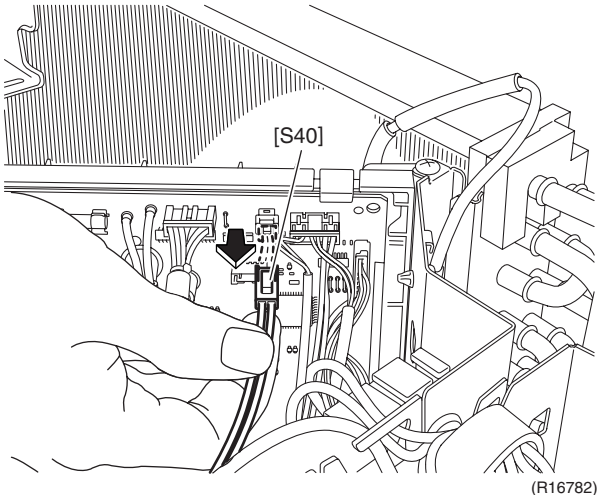
Ferrite core

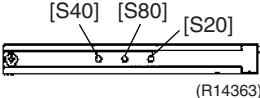
(R16951)

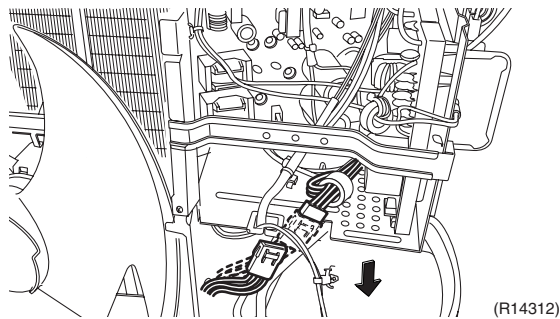
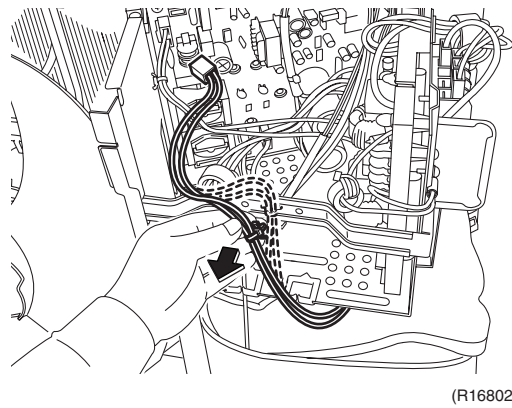
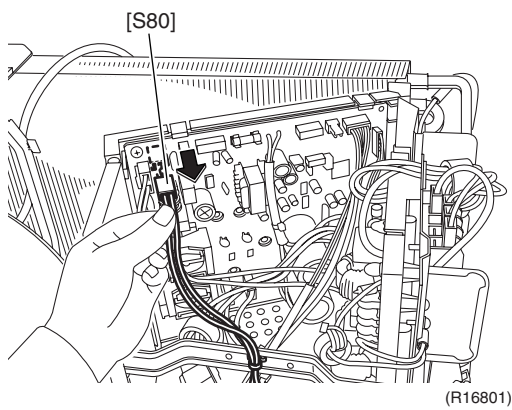
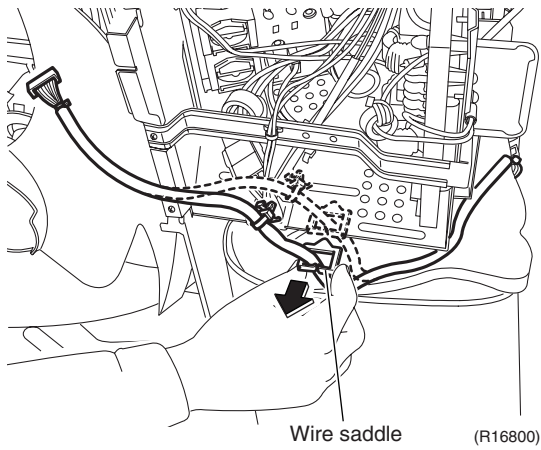


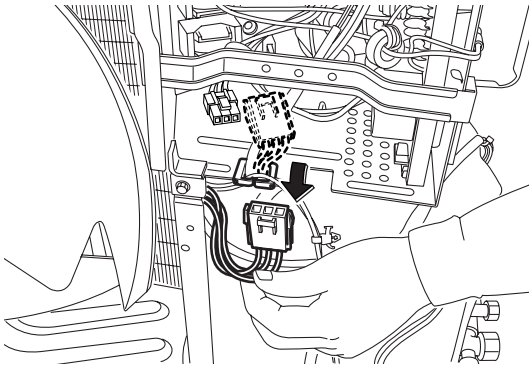
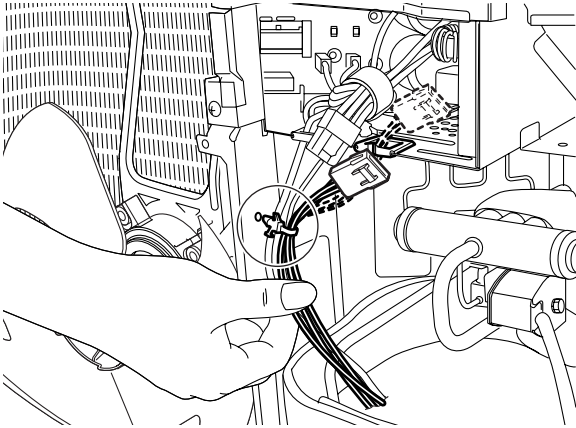
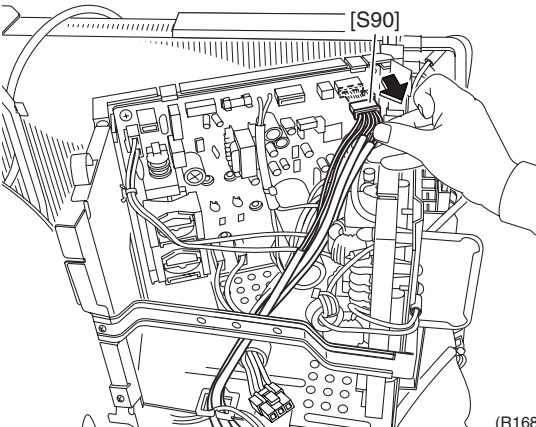
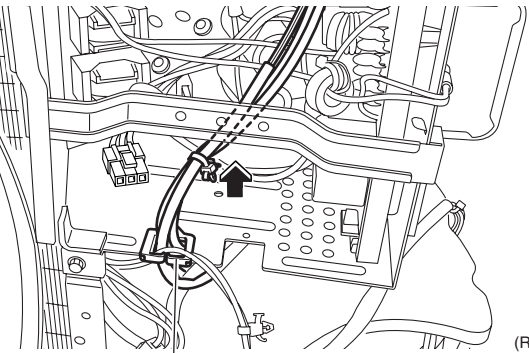
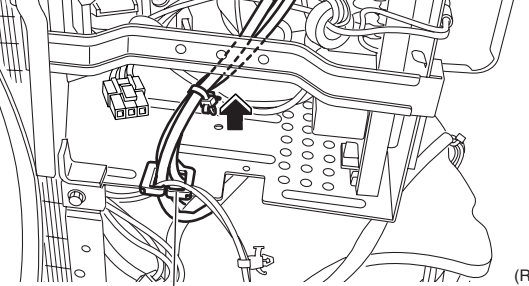
(R18900)

Step	Procedure	Points
13	Disconnect the connector [S40].	[S40]: overload protector
14	Pull out the clamp.	
15	Disconnect the connector [S20].	[S20]: electronic expansion valve coil
16	Pull out the clamp.	
17	Pull out the clamp under the electrical box.	



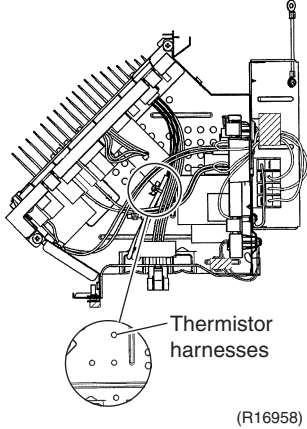
Step	Procedure	Points
18	Remove the wire saddle.	
19	Disconnect the connector [S80].	<p>[S80]: four way valve coil</p> <ul style="list-style-type: none"> ■ The cooling only models have no harness for [S80]. ■ When reassembling, insert the clamps of harnesses as below. <div style="text-align: center;">  </div>
20	Pull out the clamp.	<ul style="list-style-type: none"> ■ When reassembling, connect the connectors in the following order. <ol style="list-style-type: none"> (1) [S80] (2) [S20] (3) [S40] (4) [S70]
21	Disconnect the relay connector for the compressor.	

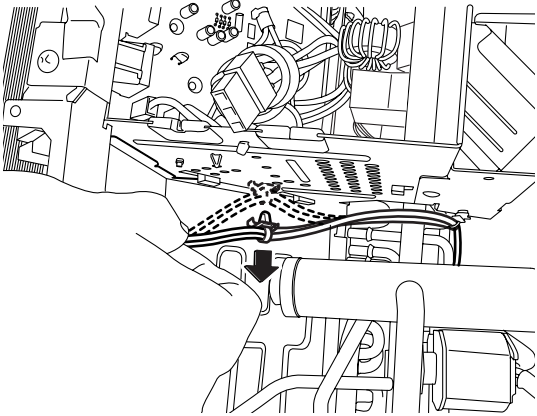
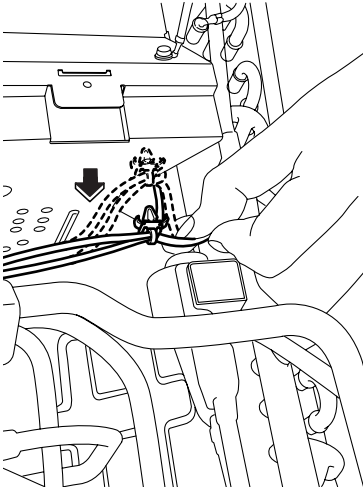
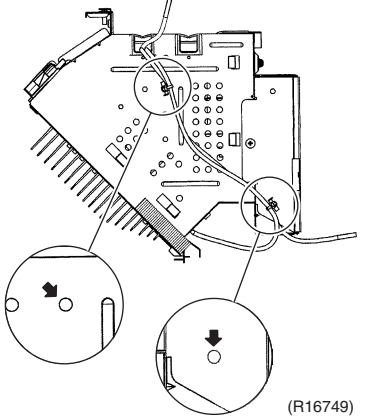
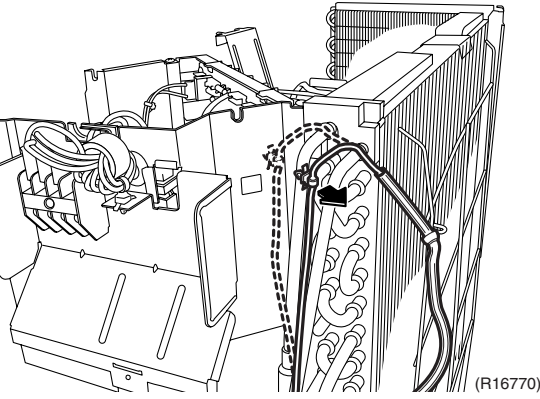
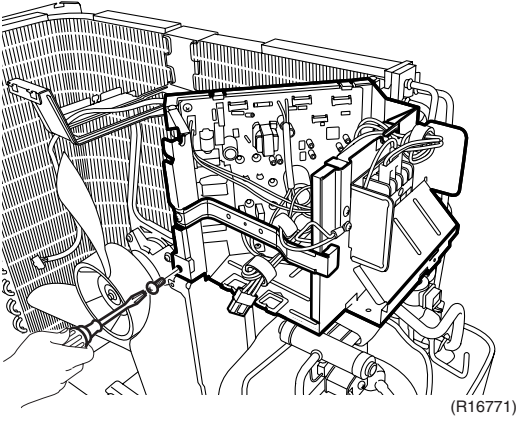


Step	Procedure	Points
22	Release the harness of the relay connector from the wire saddle.	 <p>(R14313)</p>
23	Pull out the clamp from the partition plate.	 <p>(R16950)</p>
24	Disconnect the connector [S90].	 <p>[S90]</p> <p>(R16806)</p>
25	Pull out the clamp.	 <p>(R22532)</p>
26	Remove the wire saddle.	 <p>Wire saddle</p> <p>(R22532)</p>

[S90]: thermistors

- When reassembling, pass the thermistor harness under the harnesses (HL2: blue, HN2: white) from the filter PCB.
- When reassembling, insert the clamp as below.



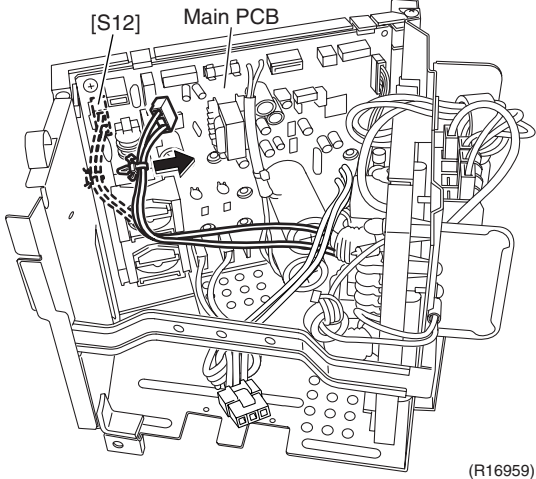
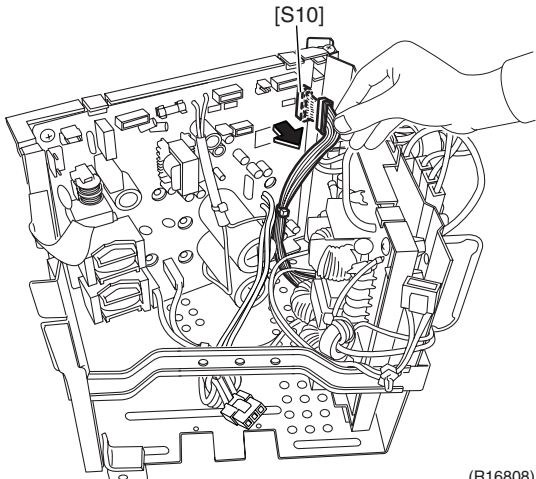
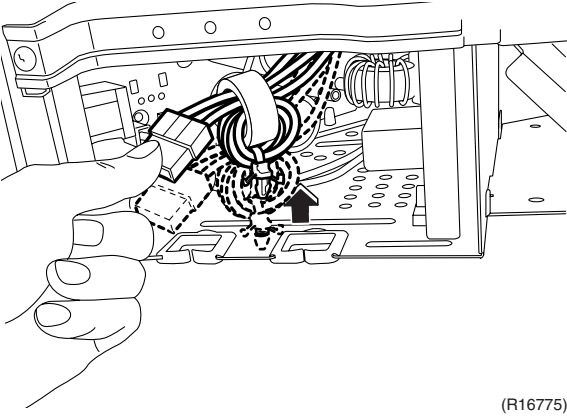
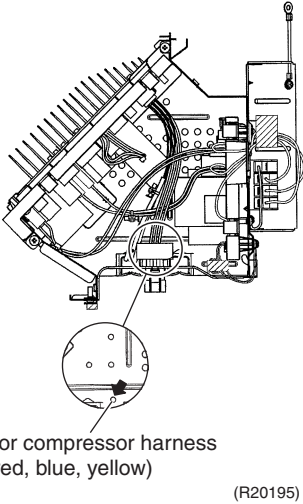
Step	Procedure	Points
<p>27 Pull out the 2 clamps at the bottom of the electrical box.</p>	 <p>(R16768)</p>  <p>(R16769)</p>	<p>■ When reassembling, insert the 2 clamps into the bottom of the electrical box.</p>  <p>(R16749)</p>
<p>28 Pull out the clamp at the back.</p>	 <p>(R16770)</p>	
<p>29 Remove the screw and remove the electrical box.</p>	 <p>(R16771)</p>	

4. PCBs

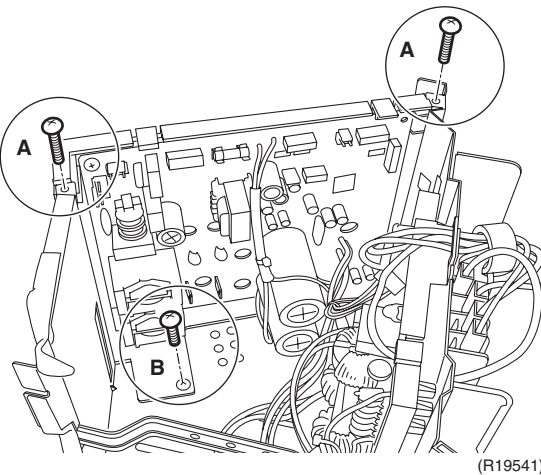
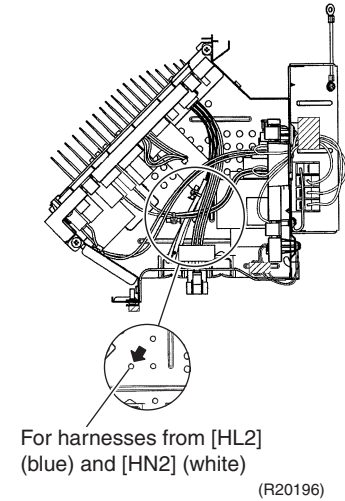
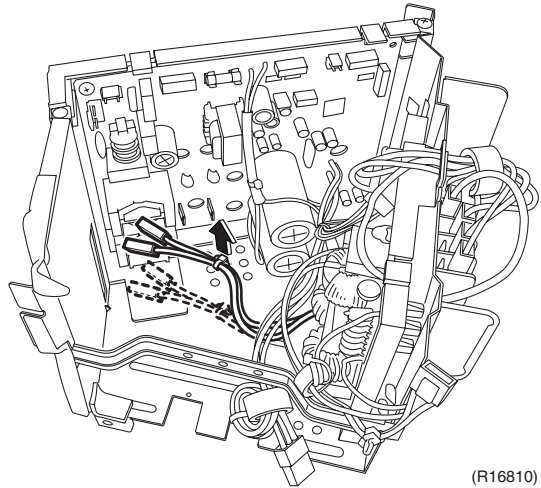
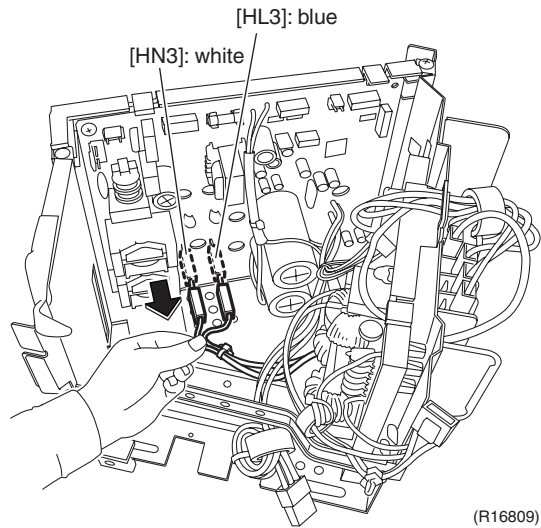


Warning

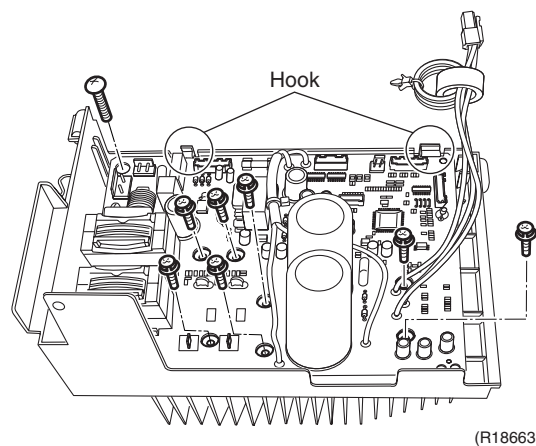
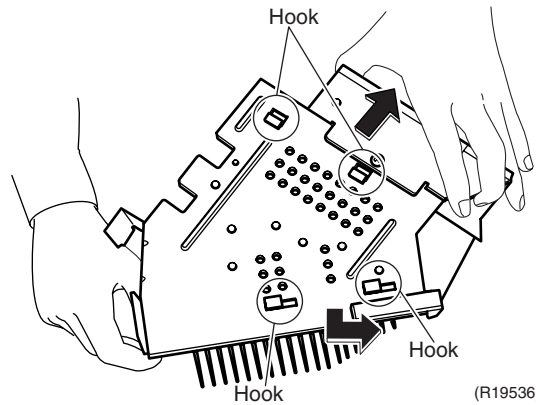
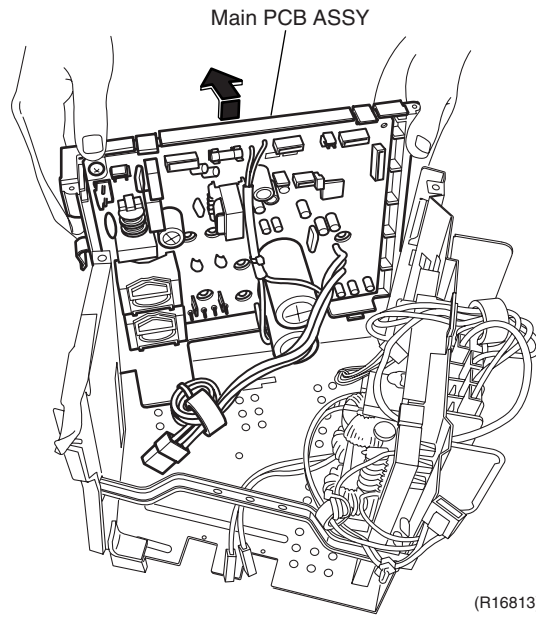
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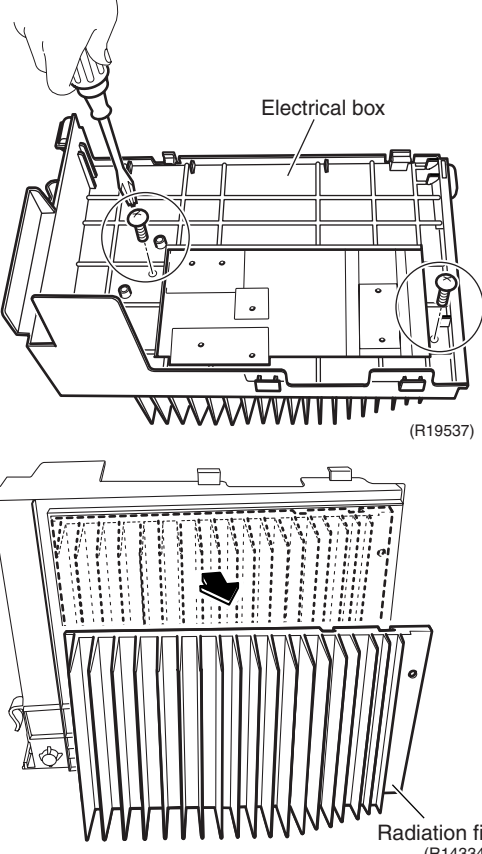
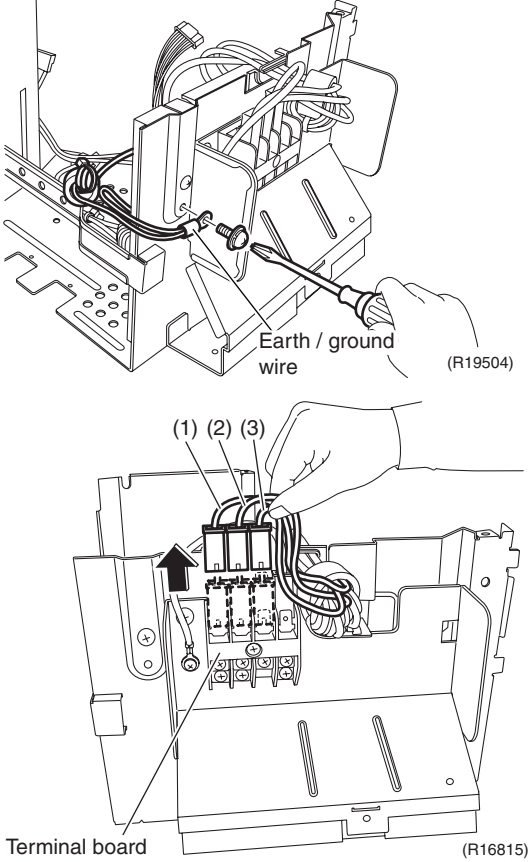
Step	Procedure	Points
1. Remove the main PCB.		[S12]: for [HL4] [HN4] on filter PCB
2. Disconnect the connector [S10].		[S10]: for [S11] on filter PCB
3. Pull out the clamp.		<ul style="list-style-type: none"> ■ When reassembling, insert the clamp as below.
		 <p>For compressor harness (red, blue, yellow)</p>

Step	Procedure	Points
4	Disconnect the connectors [HN3] [HL3].	[HL3]: for [HL2] on filter PCB [HN3]: for [HN2] on filter PCB
5	Pull out the clamp.	<ul style="list-style-type: none"> ■ When reassembling, insert the clamp as below.
6	Remove the 2 upper screws.	<ul style="list-style-type: none"> ■ Screw size A: M4 × 16 B: M4 × 8
7	Remove the lower screw.	

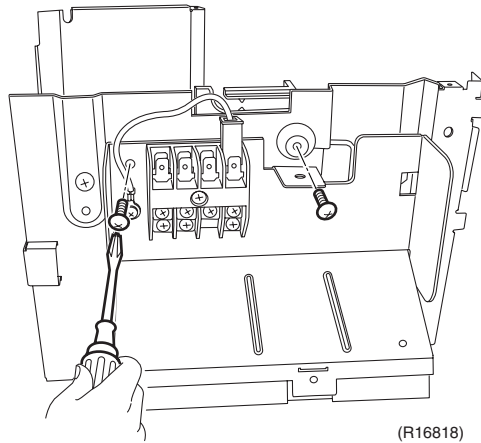
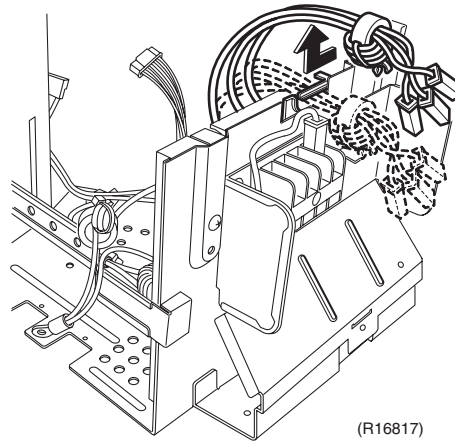
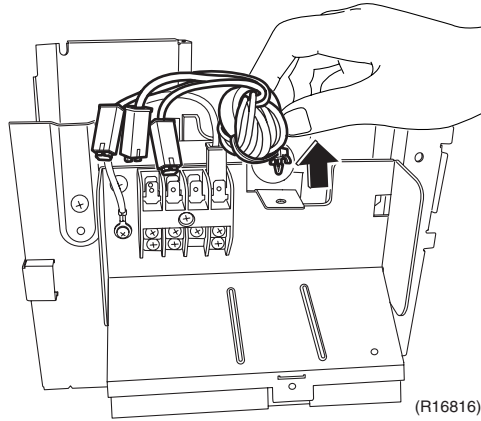


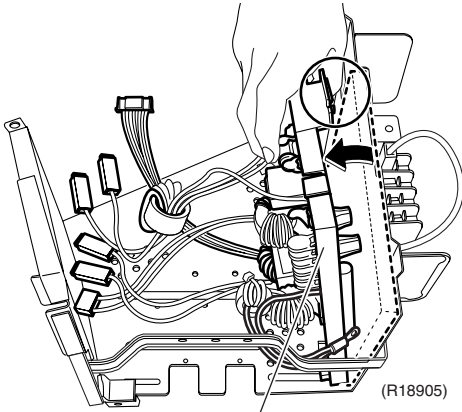
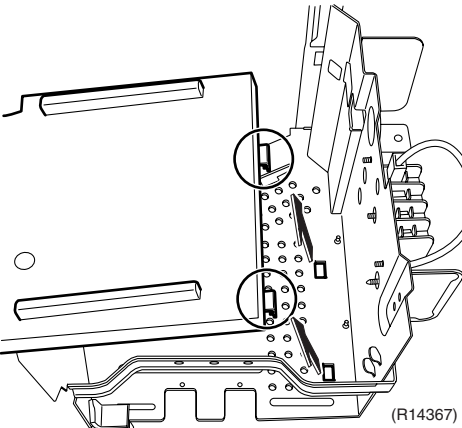
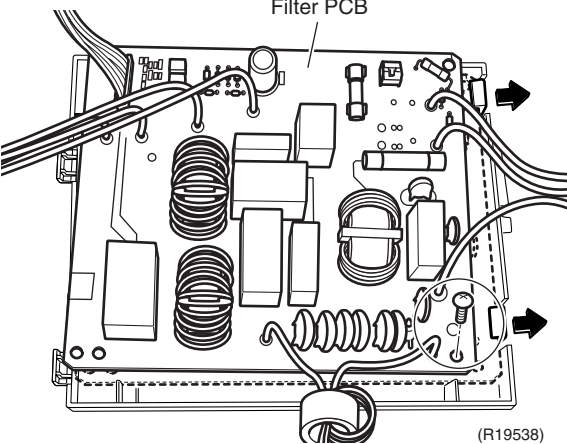
Step	Procedure	Points
8	Lift the main PCB ASSY.	
9	Unfasten the 4 hooks at the bottom.	
10	Remove the 8 screws.	
11	Unfasten the 2 hooks and remove the main PCB.	



Step	Procedure	Points
<p>2. Remove the radiation fin.</p> <p>1 Remove the 2 screws on the bottom of the electrical box.</p> <p>2 Remove the radiation fin.</p>	 <p>Electrical box (R19537)</p> <p>Radiation fin (R14334)</p>	
<p>3. Remove the filter PCB.</p> <p>1 Remove the earth / ground wire screw.</p> <p>2 Pull out the terminals from the terminal board.</p>	 <p>Earth / ground wire (R19504)</p> <p>Terminal board (R16815)</p> <p>(1) (2) (3)</p>	<p>■ Before pulling out the terminals, confirm the terminal locations from the following patterns.</p> <p>Pattern 1 (1): black (back) (2): white (back) (3): red (front)</p> <p>Pattern 2 (1): black (front) (2): white (front) (3): red (front)</p>

Step	Procedure	Points
3	Pull out the clamp.	
4	Release the harnesses from the groove.	
5	Remove the 2 screws.	



Step	Procedure	Points
6	Unfasten the 3 hooks of the filter PCB ASSY.	
	 <p>(R18905)</p> <p>Filter PCB ASSY</p>  <p>(R14367)</p>	
7	Remove the screw.	
8	Unfasten the 2 hooks and remove the filter PCB.	
	 <p>Filter PCB</p> <p>(R19538)</p>	

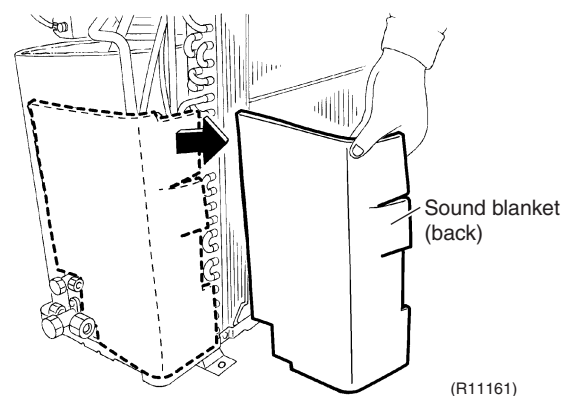
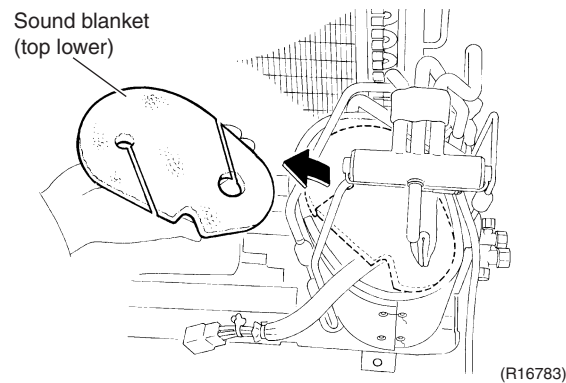
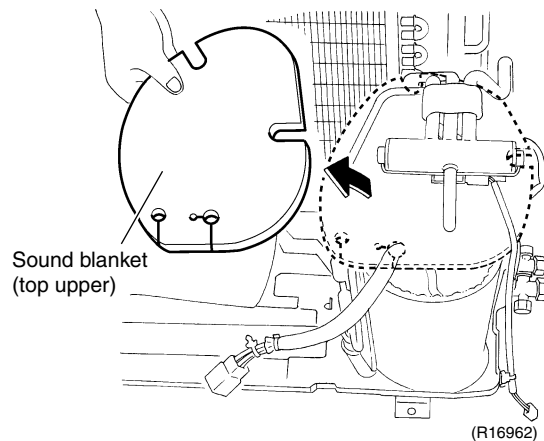
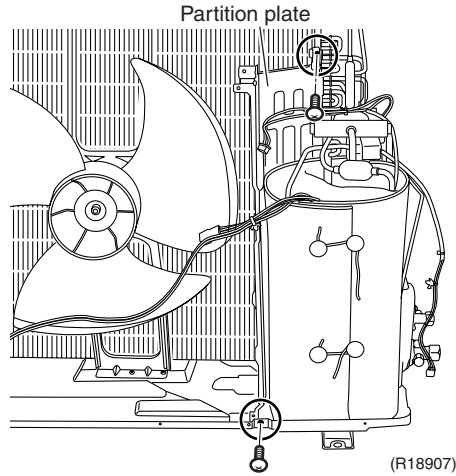
5. Sound Blankets / Thermistors

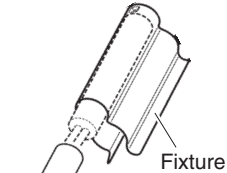
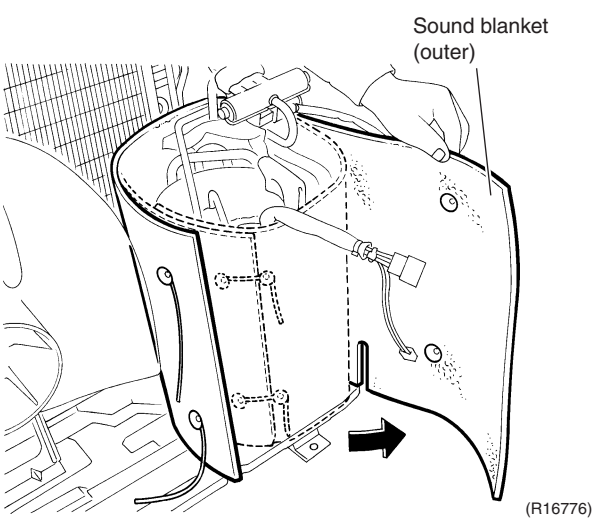
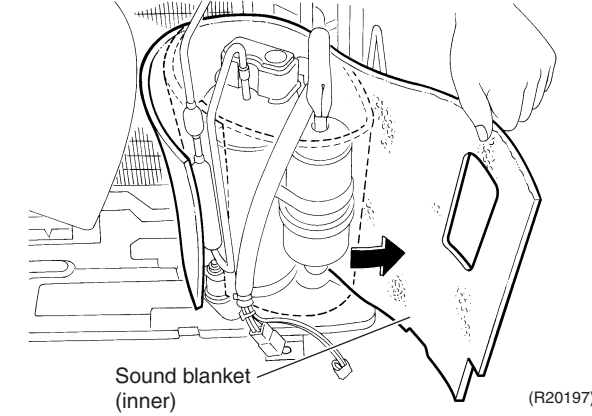
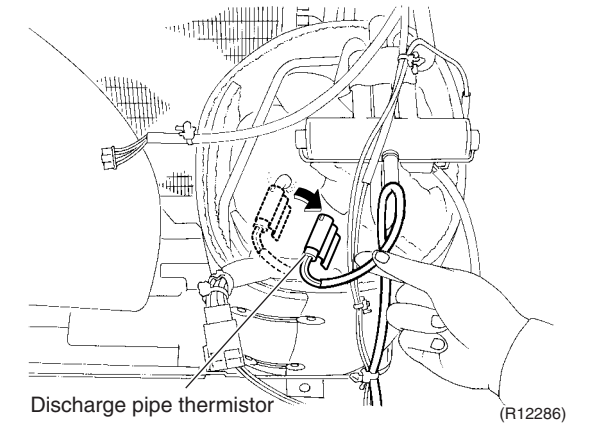


Warning

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

Step	Procedure	Points
1	Remove the 2 screws and remove the partition plate.	
2	Remove the sound blanket (top upper).	<ul style="list-style-type: none"> ■ The design of the sound blankets varies depending on the model.
3	Remove the sound blanket (top lower).	
4	Remove the sound blanket (back).	



Step	Procedure	Points
5	Remove the sound blanket (outer).	<ul style="list-style-type: none"> Since the piping ports are torn easily, remove the sound blankets carefully.
6	Remove the sound blanket (inner).	<ul style="list-style-type: none"> Be careful not to lose the fixture for the thermistor.
7	Release the discharge pipe thermistor.	 <p>Fixture</p>
8	Remove the thermistor ASSY.	(R18958)
	 <p>Sound blanket (outer)</p> <p>(R16776)</p>	
	 <p>Sound blanket (inner)</p> <p>(R20197)</p>	
	 <p>Discharge pipe thermistor</p> <p>(R12286)</p>	

6. Four Way Valve / Electronic Expansion 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.)



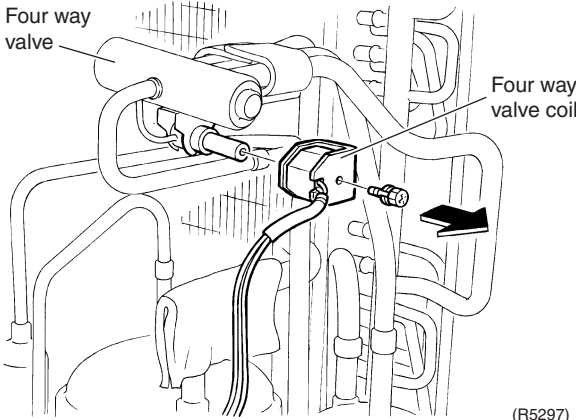
Caution

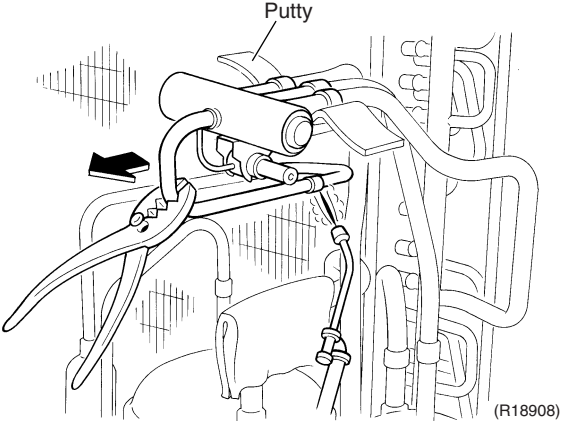
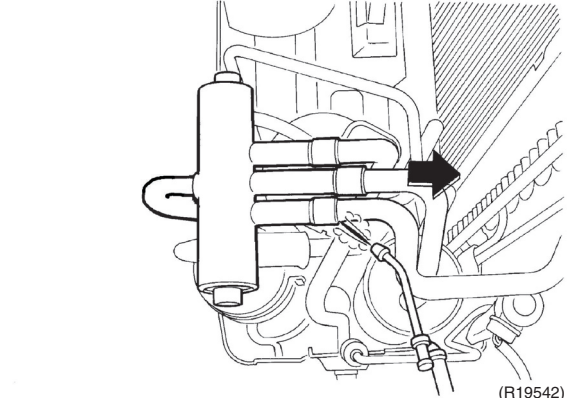
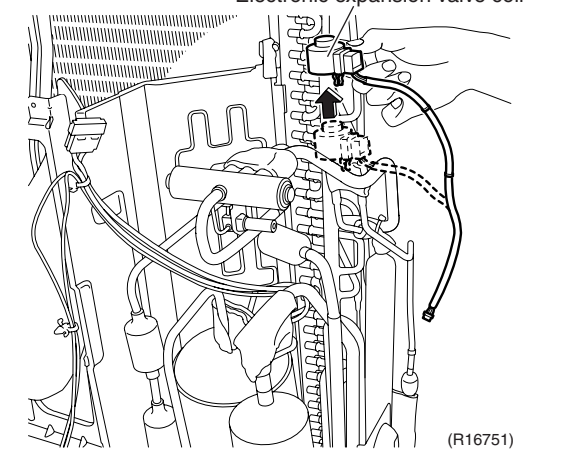
- ◆ From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.
- ◆ Cautions for restoration
 1. Restore the piping by non-oxidation brazing.
 2. It is required to prevent the carbonization of the oil inside 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.

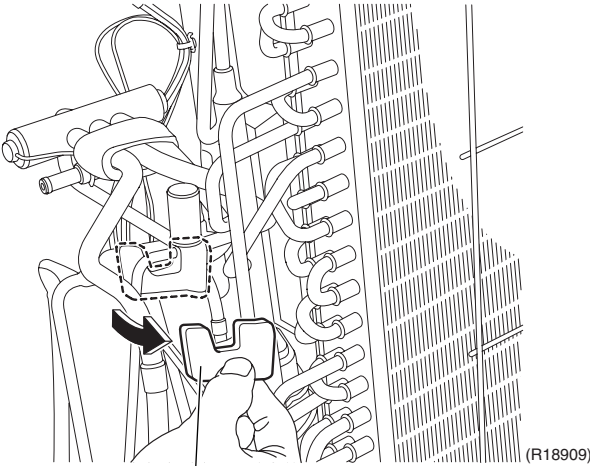
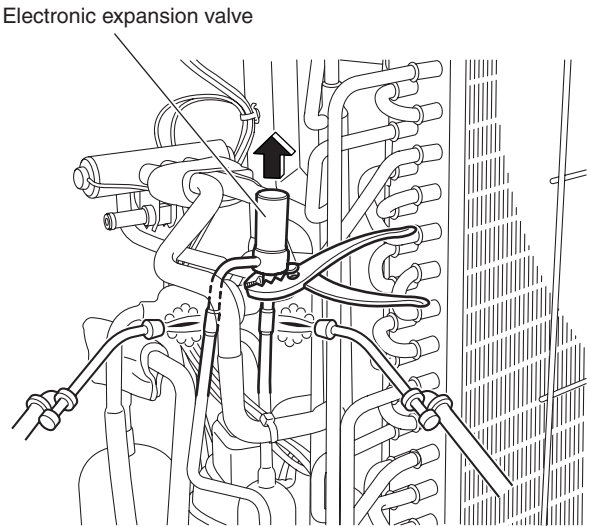


Note

- ◆ 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 four way valve.	 <p style="text-align: right;">(R5297)</p>	<ul style="list-style-type: none"> ■ The cooling only models have no four way valve coil.
1	Remove the screw and remove the four way valve coil.	

Step	Procedure	Points
2	Remove the putty. Heat up the brazed part of the four way valve and disconnect.	
3	Heat up every brazed parts in turn and remove the four way valve.	
2. Remove the electronic expansion valve.	 	
1	Pull out the electronic expansion valve coil.	

Step	Procedure	Points
2	Remove the sheets of putty.	
	 <p data-bbox="655 696 707 719">Putty</p>	
3	Heat up the 2 brazed parts of the electronic expansion valve and remove it.	
	 <p data-bbox="485 748 738 770">Electronic expansion valve</p>	

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.



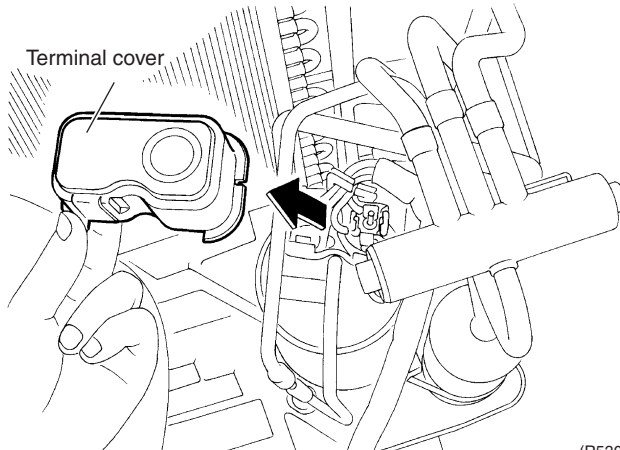
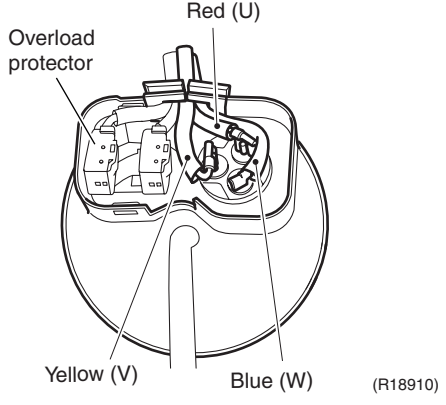
Caution

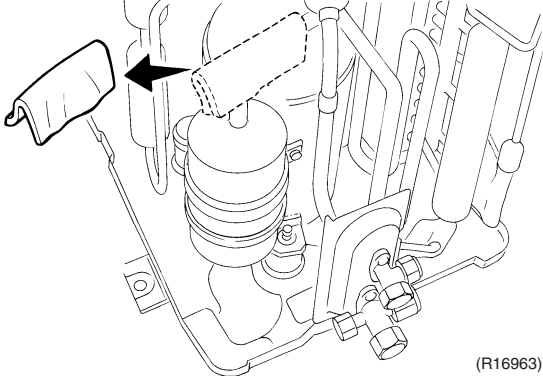
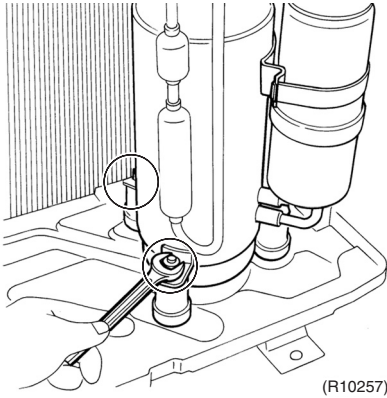
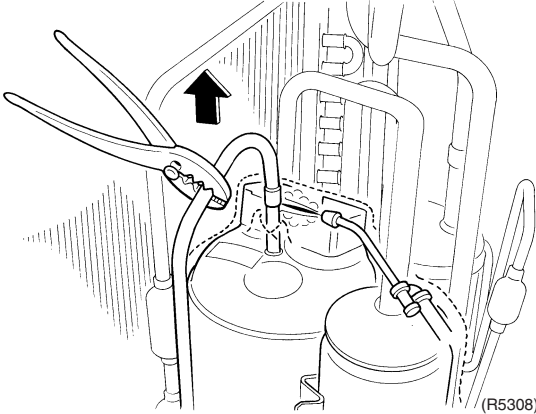
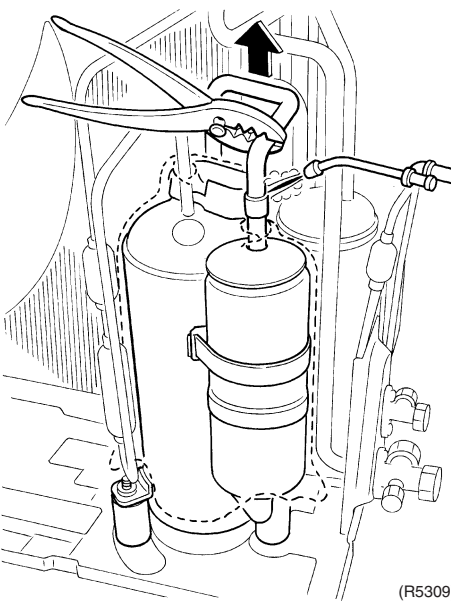
- ◆ From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.
- ◆ Restore the piping by non-oxidation brazing.



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.		
2	Pull out the compressor lead wires.		(R5302)
3	Remove the overload protector.		

Step	Procedure	Points
4	Remove the putty.	
	 <p>(R16963)</p>	
5	Remove the 2 nuts of the compressor.	
	 <p>(R10257)</p>	
6	Heat up the brazed part of the discharge side and disconnect it.	
	 <p>(R5308)</p>	
7	Heat up the brazed part of the suction side and disconnect it.	
	 <p>(R5309)</p>	
8	Lift up the compressor and remove it.	

Revision History

Month / Year	Version	Revised contents
04 / 2013	Si001274	First edition
11 / 2013	Si001274EA	Model addition: RKS50/60GVM4, RKS50/60GVMV
03 / 2014	Si001274EB	Model addition: RXG50L2V1B
09 / 2015	Si001274EC	Model addition: RKS50J2V1B9, RKS60F3V1B9, RX50/60G2V1B9, RXS50J2V1B9, RXS60F3V1B9

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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