


REMOVAL PROCEDURE



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

5.0 kW Class

-  Outdoor Unit
-  Inverter
-  Pair Type



Service Manual Removal Procedure

Outdoor Unit

●Cooling Only
RKC50NRV16

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Note: ♦ The illustrations may be slightly different depending on the model.

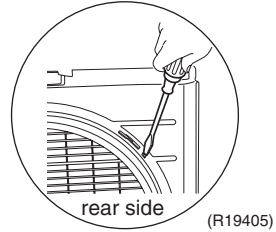
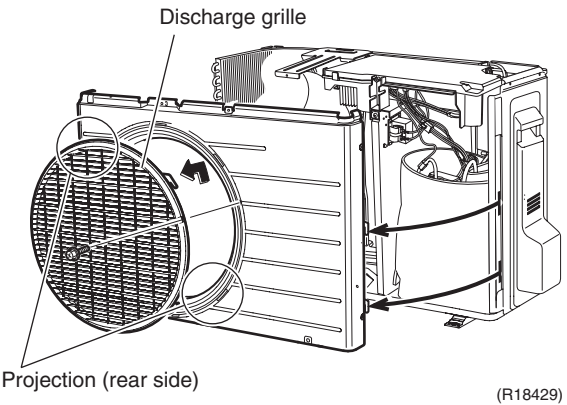
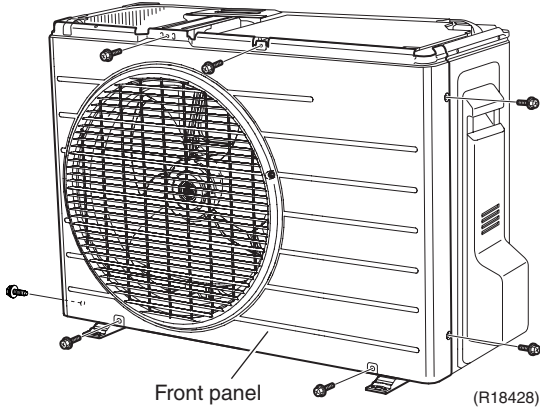
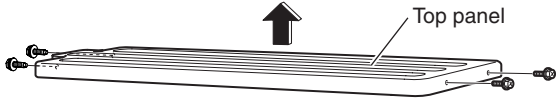
1. Outer Panels



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.	
2	Remove the 7 screws of the front panel.	
3	Unfasten the right side hooks and remove the front panel.	
4	Remove the screw and remove the discharge grille.	



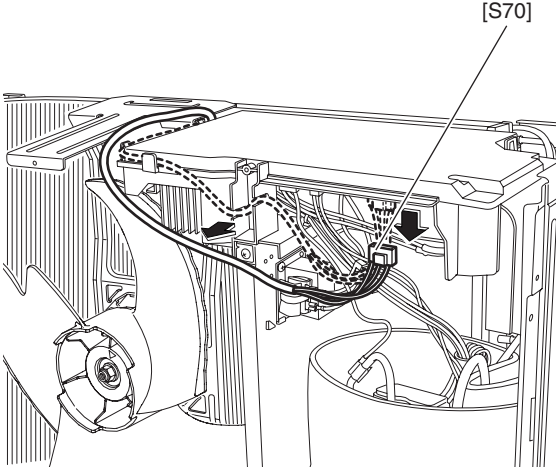
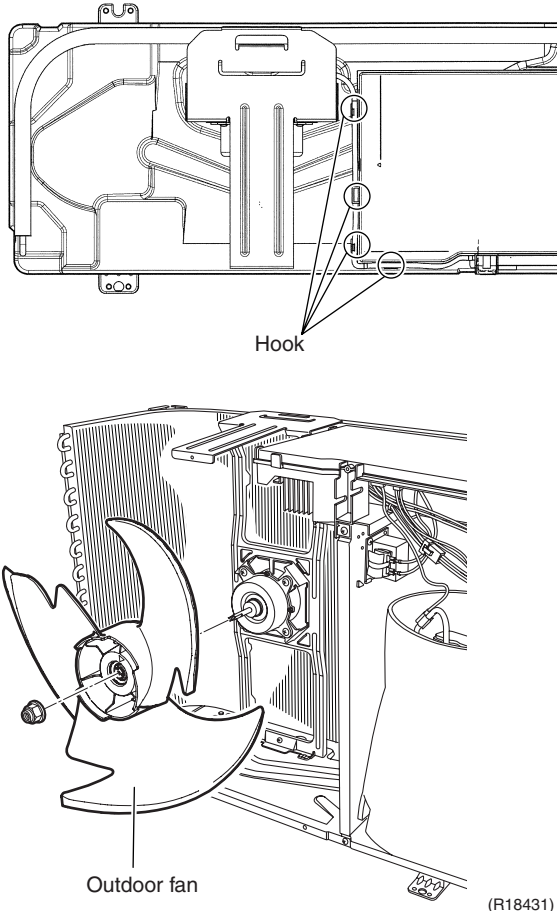
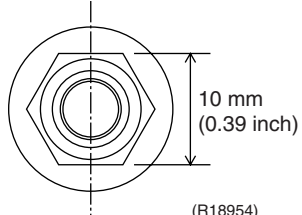
■ The discharge grille has 2 projections to prevent its rotation. Press the projection from the rear side and rotate the discharge grille to remove it.

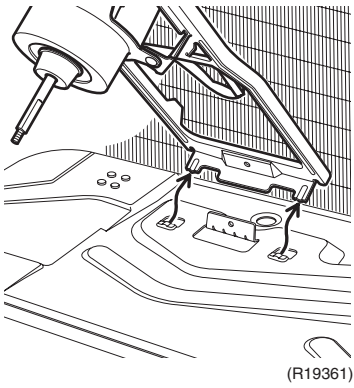
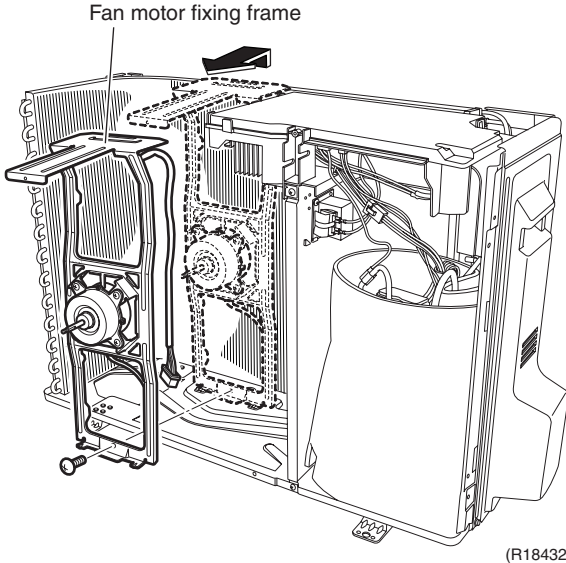
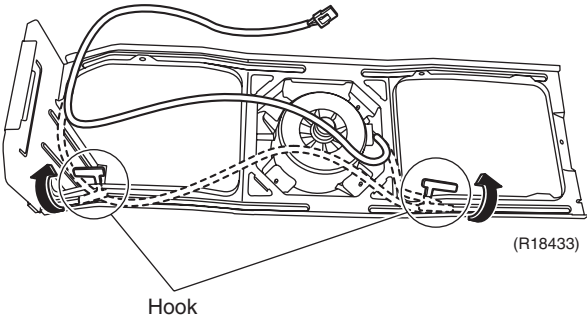
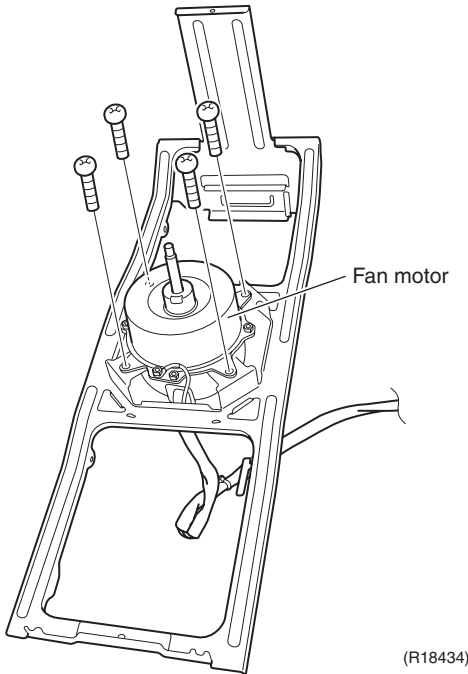
2. Outdoor Fan / Fan Motor



Warning

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

Step	Procedure	Points
<p>1 Disconnect the connector [S70].</p> <p>2 Release the fan motor lead wire from the groove of the partition plate and the 4 hooks on the electrical box.</p>	 <p>(R18430)</p>	<ul style="list-style-type: none"> ■ This procedure is not necessary to remove the outdoor fan only. <p>[S70]: fan motor</p>
<p>3 Remove the nut and remove the outdoor fan.</p>	 <p>Hook</p> <p>Outdoor fan</p> <p>(R19360)</p> <p>(R18431)</p>	<ul style="list-style-type: none"> ■ Nut size: M6  <p>10 mm (0.39 inch)</p> <p>(R18954)</p> <ul style="list-style-type: none"> ■ When reassembling, align the ▼ mark of the outdoor fan with the D-cut section of the motor shaft.

Step	Procedure	Points
4	Remove the screw of the fan motor fixing frame.	 <p>(R19361)</p>
5	Unfasten the 2 hooks at the bottom and remove the fan motor fixing frame.	 <p>Fan motor fixing frame</p> <p>(R18432)</p>
6	Open the 2 hooks and release the fan motor lead wire.	 <p>Hook</p> <p>(R18433)</p>
7	Remove the 4 screws and remove the fan motor.	 <p>Fan motor</p> <p>(R18434)</p>

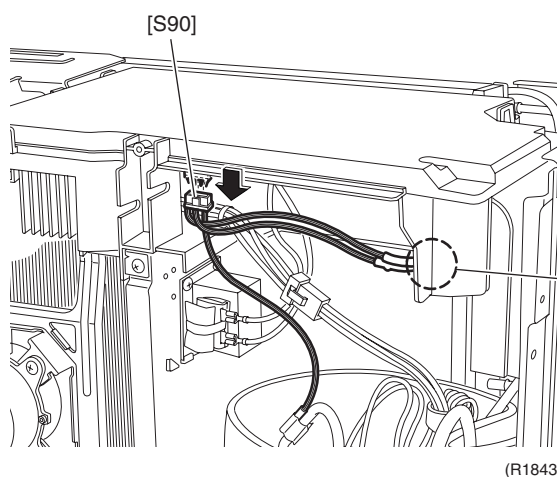
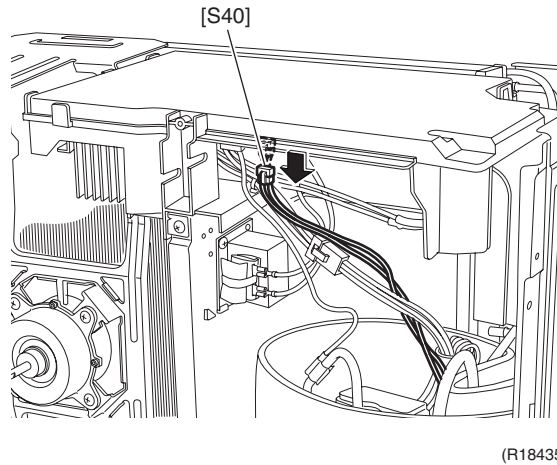
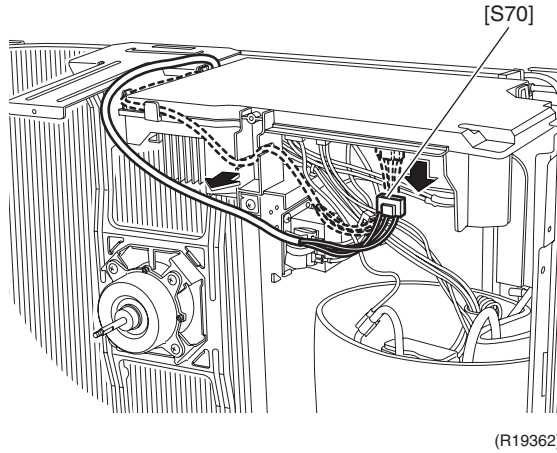
3. Electrical Box

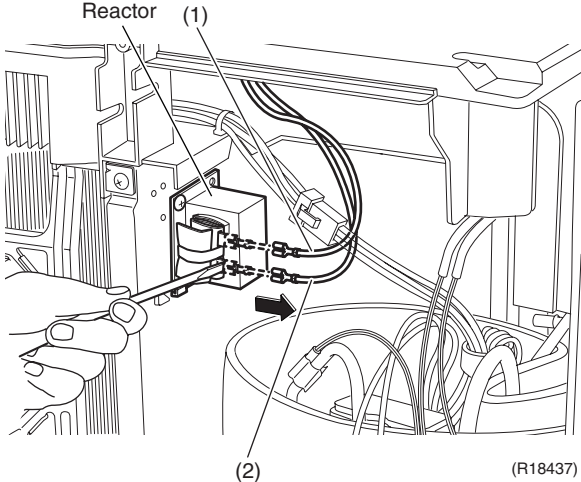
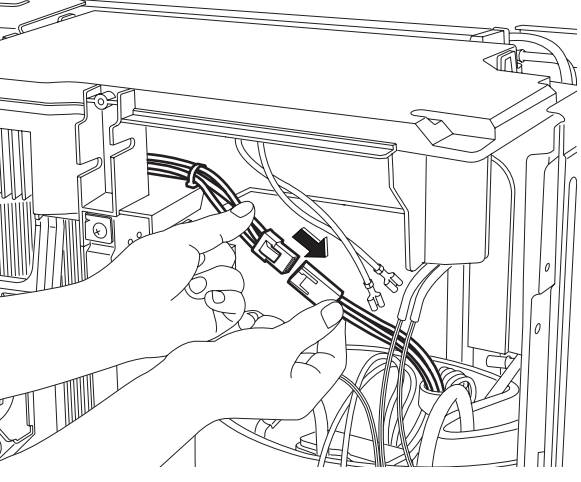
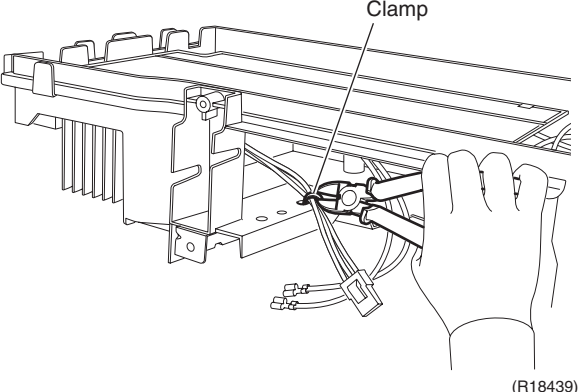
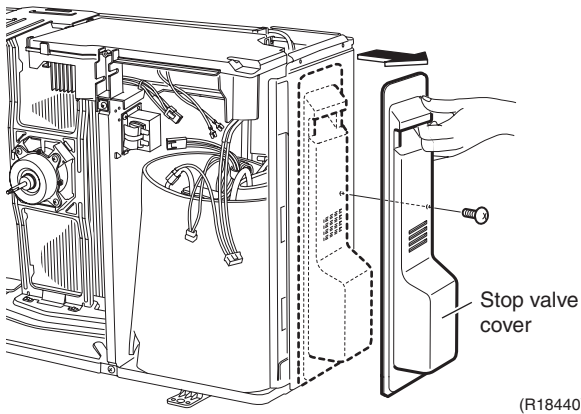


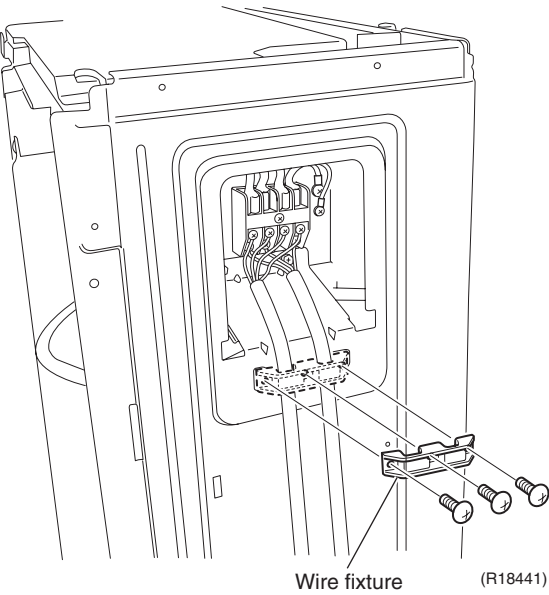
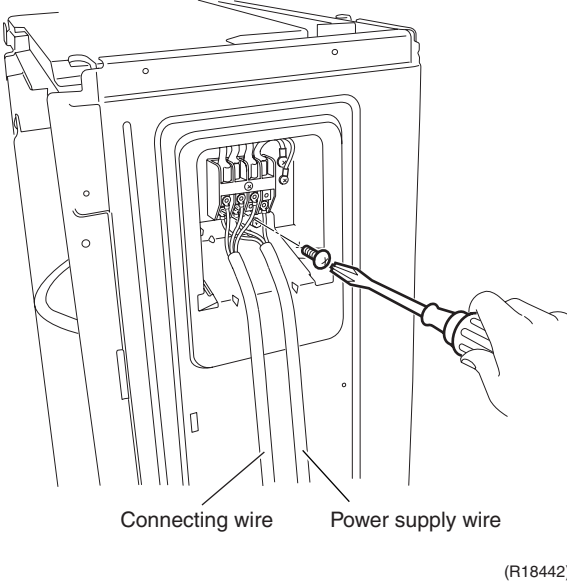
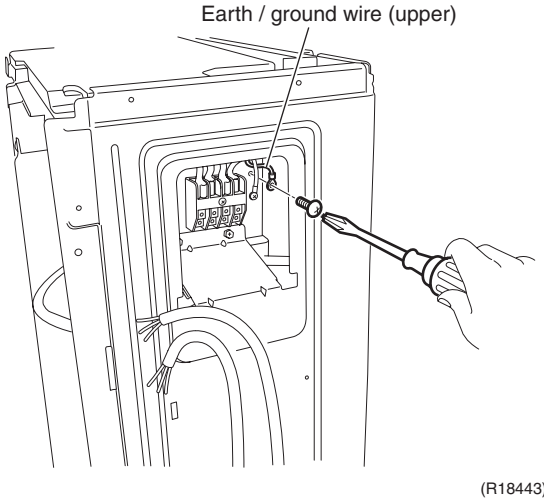
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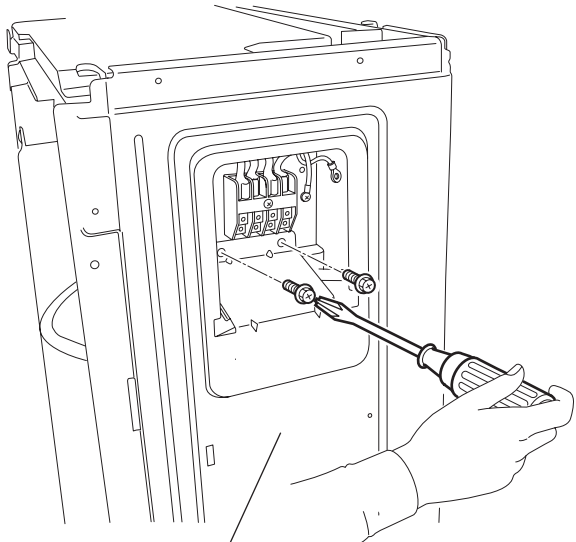
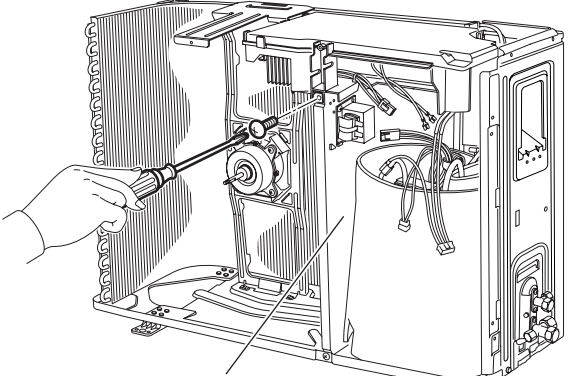
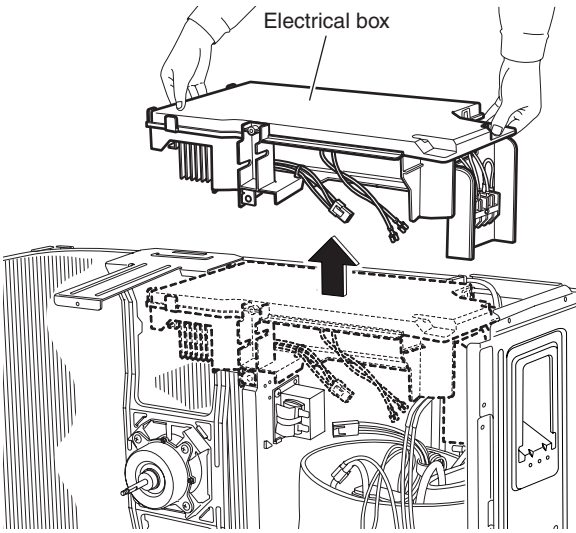
- ◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1	Disconnect the connector [S70].	[S70]: fan motor
2	Disconnect the connector [S40].	[S40]: overload protector
3	Cut the clamp and disconnect the connector [S90].	[S90]: thermistors



Step	Procedure	Points
4	Disconnect the 2 connectors of the reactor.	(1) orange (2) brown
	 <p>(R18437)</p>	
5	Disconnect the relay connector for the compressor.	
	 <p>(R18438)</p>	
6	Cut the clamp of the relay connector harness.	
	 <p>(R18439)</p>	
7	Remove the screw and remove the stop valve cover.	
	 <p>(R18440)</p>	

Step	Procedure	Points
8	Remove the 3 screws and remove the wire fixture.	
	 <p>Wire fixture (R18441)</p>	
9	Remove the 7 screws and remove the connecting wire and the power supply wire.	
	 <p>Connecting wire Power supply wire (R18442)</p>	
10	Remove the earth / ground screw (upper).	
	 <p>Earth / ground wire (upper) (R18443)</p>	

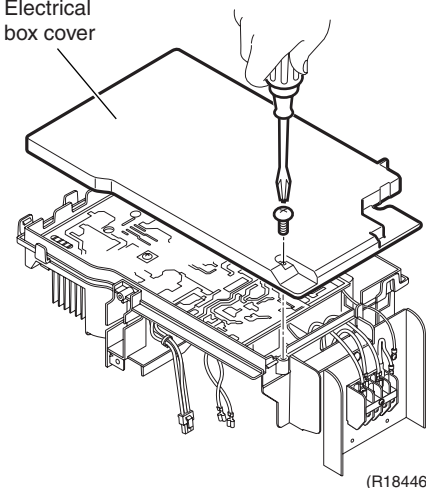
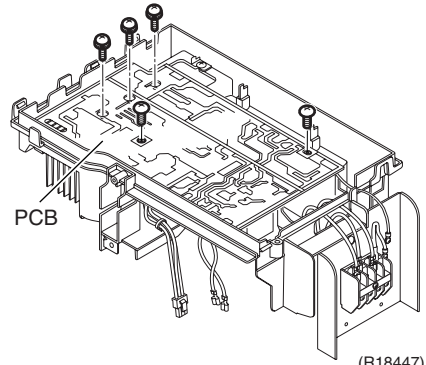
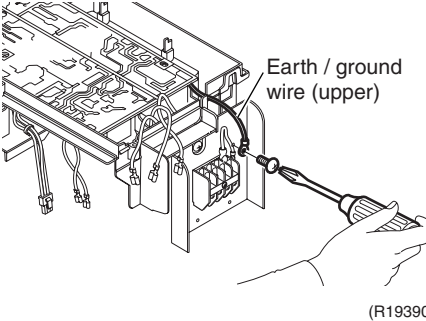
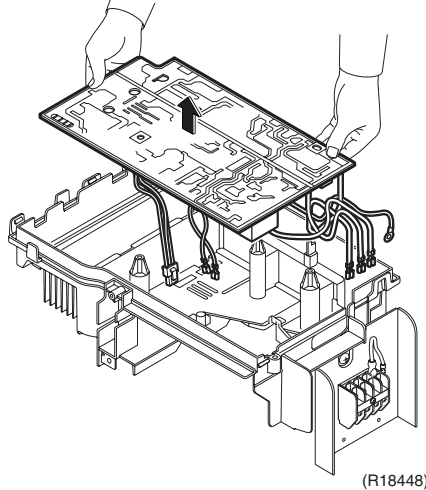
Step	Procedure	Points
11	Remove the 2 screws on the right side panel.	
 <p data-bbox="616 779 767 808">Right side panel</p> <p data-bbox="938 790 1007 813">(R19364)</p>		
12	Remove the screw on the partition plate.	
 <p data-bbox="643 1243 775 1272">Partition plate</p> <p data-bbox="1002 1267 1070 1290">(R18444)</p>		
13	Lift and remove the electrical box.	
 <p data-bbox="754 1339 887 1368">Electrical box</p> <p data-bbox="1002 1868 1070 1890">(R18445)</p>		

4. PCB



Warning

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

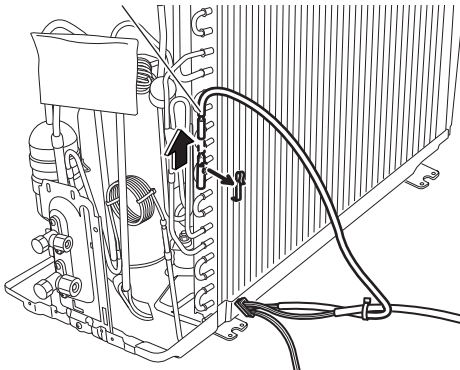
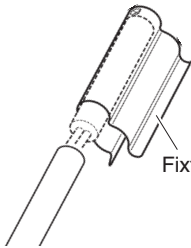
Step	Procedure	Procedure	Points
1	Remove the screw and remove the electrical box cover.		
2	Remove the 5 screws of the PCB.		
3	Remove the earth / ground screw (upper).		
4	Remove the PCB.		

5. Thermistor ASSY



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 outdoor temperature thermistor.	Outdoor temperature thermistor
2	Remove the 5 screws of the right side panel.	Right side panel
3	Remove the right side panel.	(R18449)
4	Release the discharge pipe temperature thermistor.	Discharge pipe temperature thermistor
5	Pull out the outdoor heat exchanger thermistor and remove the thermistor ASSY.	Outdoor heat exchanger thermistor
		<p>■ Be careful not to lose the fixture for the thermistor.</p>  <p>Fixture</p> <p>(R19407)</p>

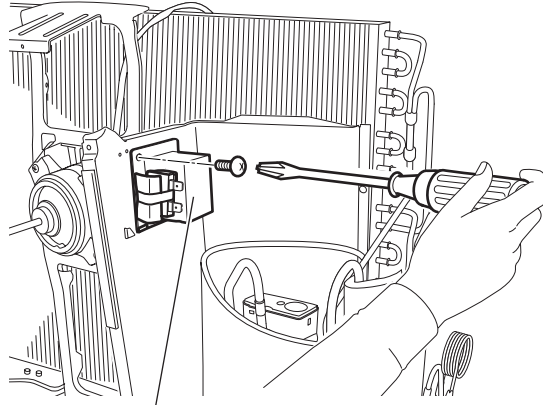
6. Reactor / Sound Blanket



Warning

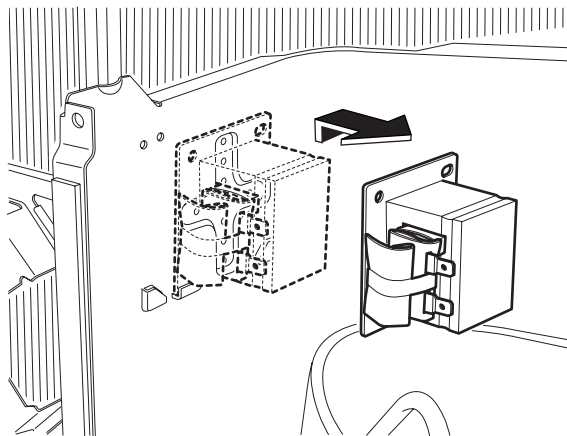
- ◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1	Remove the screw.	
2	Remove the reactor.	<ul style="list-style-type: none"> ■ There is a hook at the bottom of the reactor.
3	Remove the sound blanket.	<ul style="list-style-type: none"> ■ Since the piping ports are torn easily, remove the sound blanket carefully.

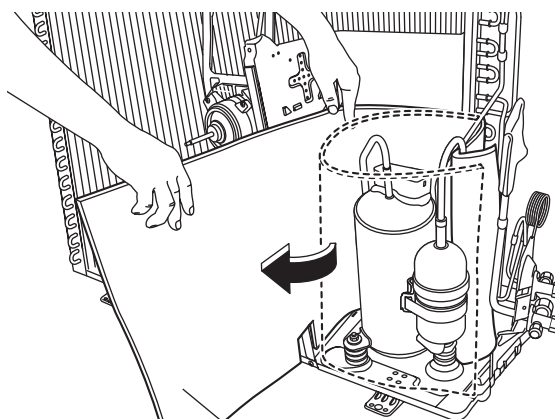


Reactor

(R18454)



(R18455)



Sound blanket

(R18457)

7. Capillary Tube



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

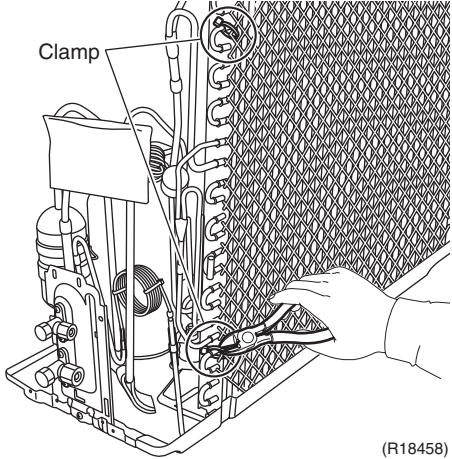
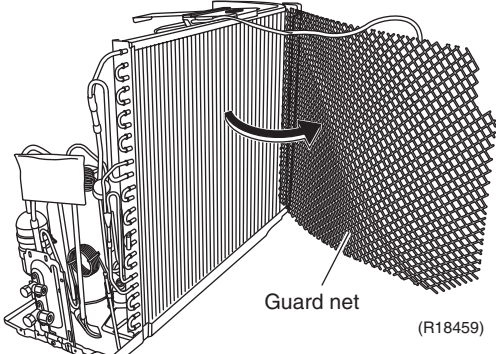
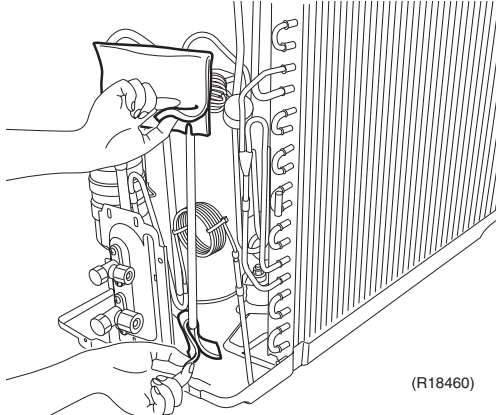
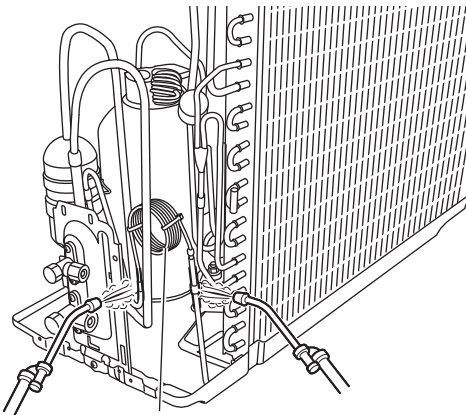
- ◆ From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.
- ◆ Restore the piping by non-oxidation brazing.



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 2 screws and remove the partition plate.	

Step		Procedure	Points
2	Cut the 2 clamps of the guard net.	 <p>Clamp</p> <p>(R18458)</p>	
3	Open the guard net.	 <p>Guard net</p> <p>(R18459)</p>	
4	Remove the putty.	 <p>(R18460)</p>	
5	Heat up the brazed parts and disconnect the capillary tube.	 <p>Capillary tube</p>	

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.



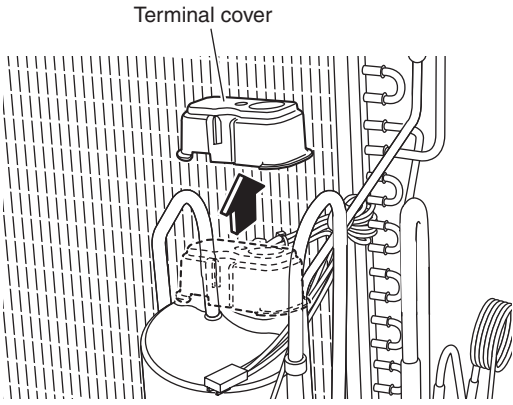
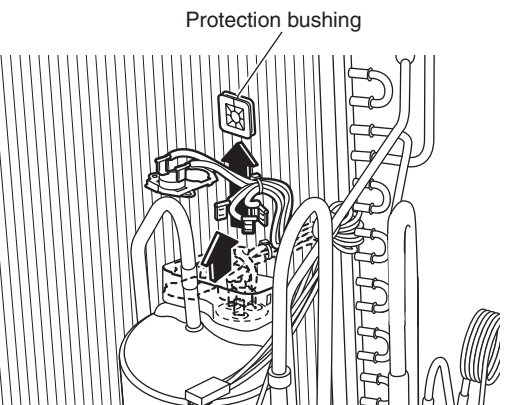
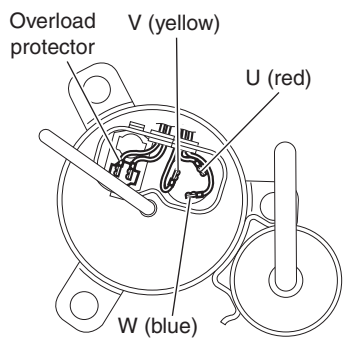
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- ◆ Restore the piping by non-oxidation brazing.

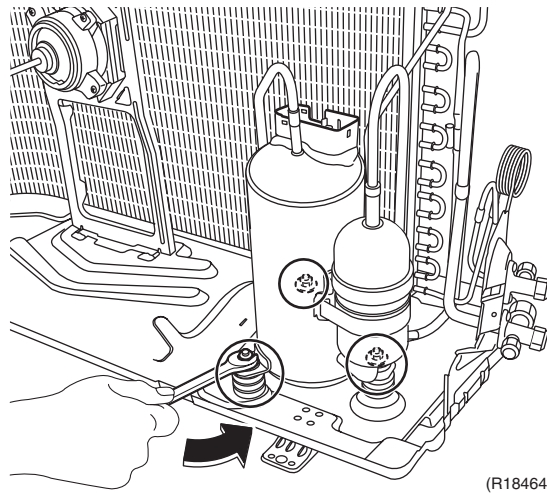
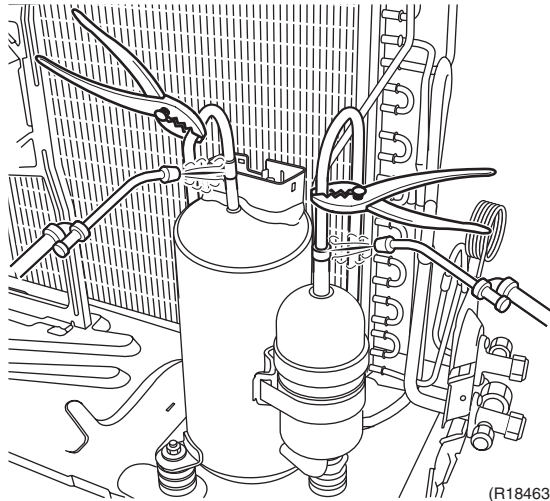


Note

- ◆ 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	Procedure	Points
1	Remove the terminal cover.	 <p style="text-align: center;">Terminal cover</p> <p style="text-align: right;">(R18461)</p>	
2	Remove the protection bushing.	 <p style="text-align: center;">Protection bushing</p> <p style="text-align: right;">(R18462)</p>	 <p style="text-align: right;">(R19365)</p>
3	Disconnect the compressor lead wires and the overload protector.		

Step	Procedure	Points
4	Heat up the brazed part of the discharge side and disconnect.	
5	Heat up the brazed part of the suction side and disconnect.	
6	Remove the 3 nuts of the compressor.	
7	Lift the compressor up and remove it.	



Revision History

Month / Year	Version	Revised contents
09 / 2013	Si001268E	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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