



REMOVAL PROCEDURE



SERVICE
MANUAL

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

4.2 kW Class

-  Outdoor Unit
-  Inverter
-  Pair Type



Service Manual Removal Procedure

Outdoor Unit

●Heat Pump

ARXS42G3V1B

RXS42K2V1B

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Note:

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

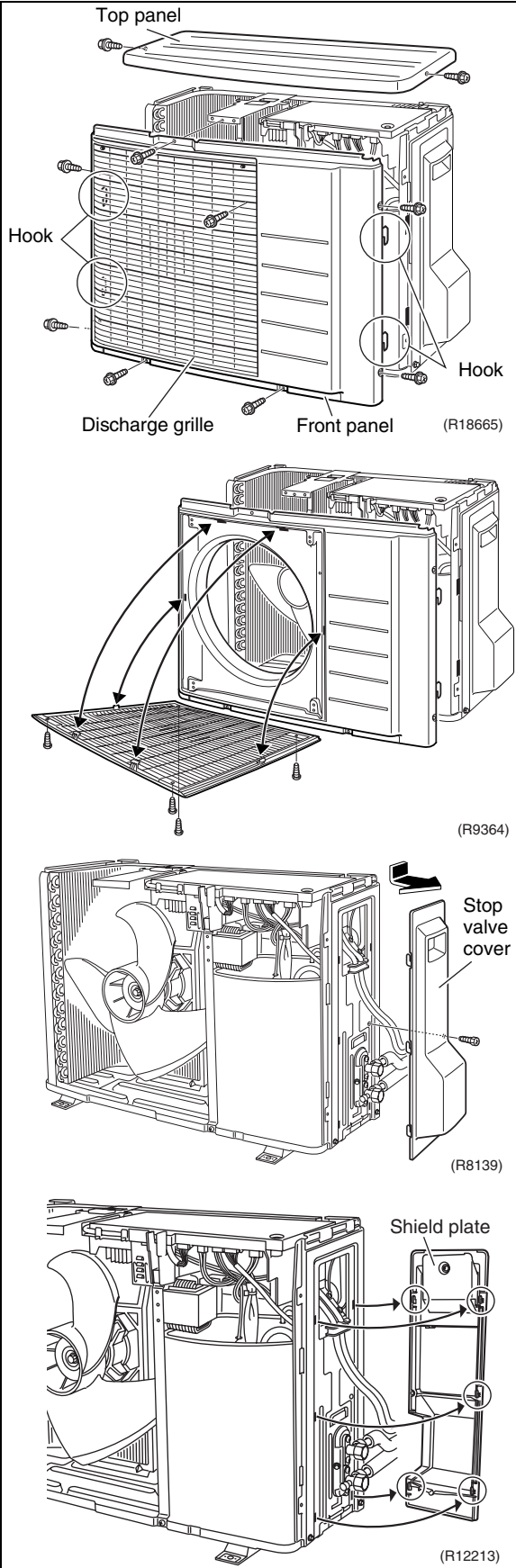
1. Outer Panels



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 2 screws and remove the top panel.	■ The front panel has 4 hooks.
2	Remove the 8 screws and remove the front panel.	■ When reassembling, make sure to fit the 4 hooks.
3	Remove the 4 screws and remove the discharge grille.	■ The stop valve cover is united with the shield plate.
4	Remove the screw and remove the stop valve cover.	■ When reassembling, make sure to fit the 5 hooks.



2. Electrical Box

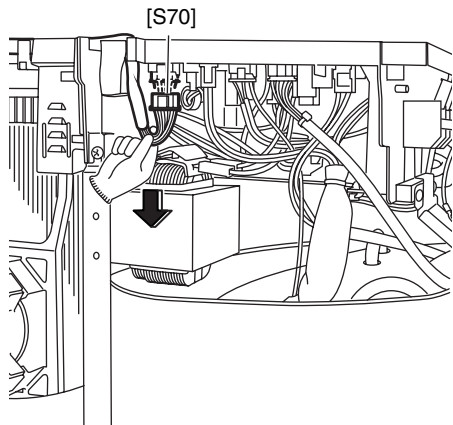


Warning

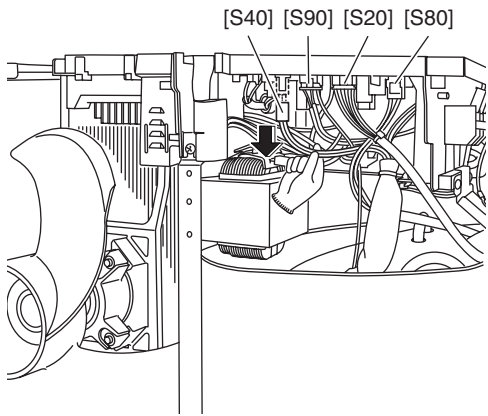
- ◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1	Remove the 3 screws and remove the wire fixture.	<ul style="list-style-type: none"> ■ When reassembling, fasten the wires with screws on the terminal board.
2	Remove all the screws to disconnect the power supply cables and the connecting wires.	
3	Release the outdoor temperature thermistor.	
4	Lift up the protection net and remove it.	
5	Remove the 7 screws and remove the right side panel.	
<p style="text-align: right;">(R18666)</p>		
<p style="text-align: right;">(R12193)</p>		
<p style="text-align: right;">(R18894)</p>		
<p style="text-align: right;">(R12217)</p>		

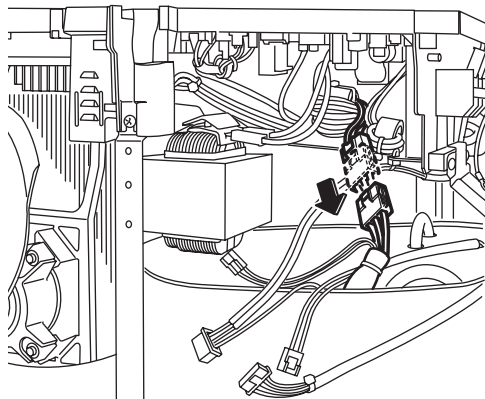
Step	Procedure	Points
6	Disconnect the connector [S70].	[S70]: fan motor
7	Disconnect the connector [S20] [S40] [S80] [S90].	[S20]: electronic expansion valve coil [S40]: overload protector [S80]: four way valve coil [S90]: thermistors
8	Disconnect the relay connector for the compressor.	
9	Disconnect the 2 connectors for the reactor.	<ul style="list-style-type: none"> ■ When reassembling, you can connect the 2 harnesses in either way regardless of the color.



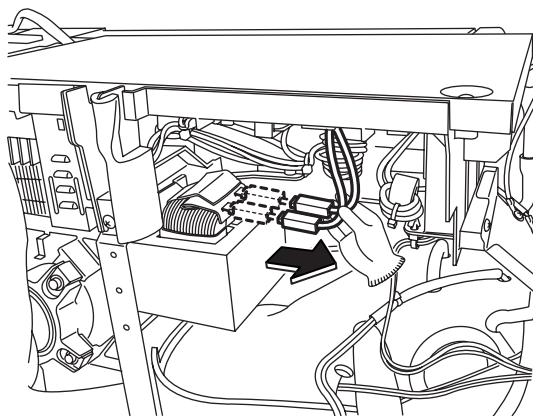
(R0254)



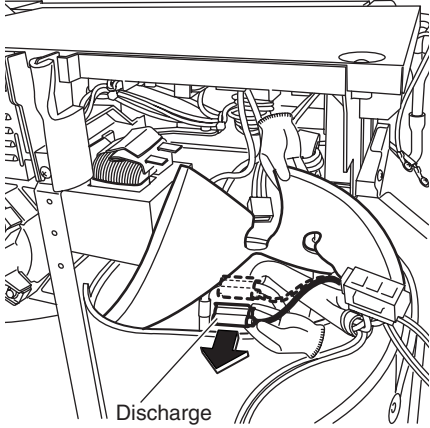
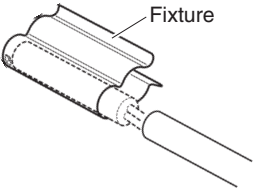
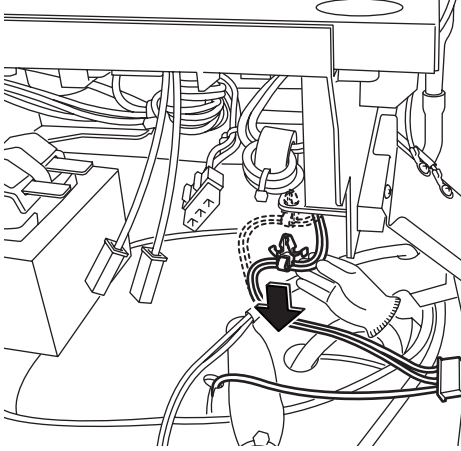
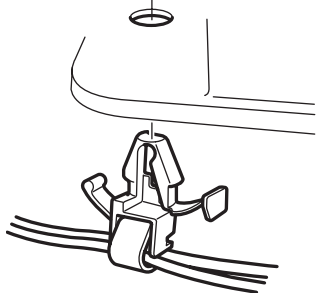
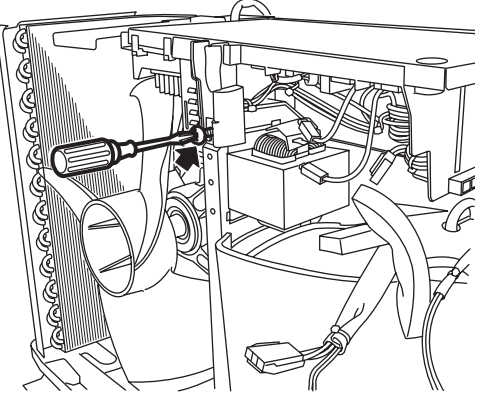
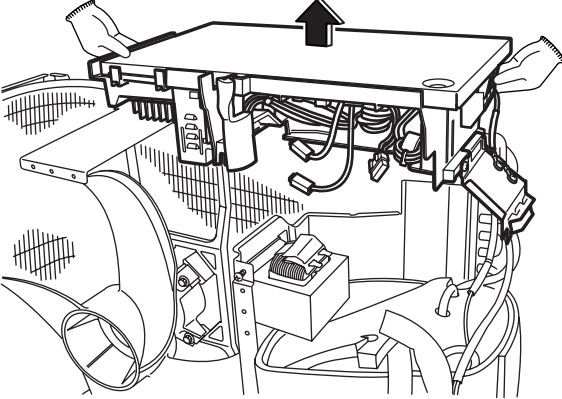
(R18668)



(R0259)



(R0260)

Step		Procedure	Points
10	Release the discharge pipe thermistor.	 <p>Discharge pipe thermistor (R12197)</p>	<p>■ Be careful not to lose the fixture for the thermistor.</p>  <p>(R18789)</p>
11	Detach the clamp for the thermistors from the electrical box.	 <p>(R0262)</p>	 <p>(R12196)</p>
12	Remove the screw in front of the electrical box.	 <p>(R0263)</p>	
13	Lift and remove the electrical box.	 <p>(R0264)</p>	

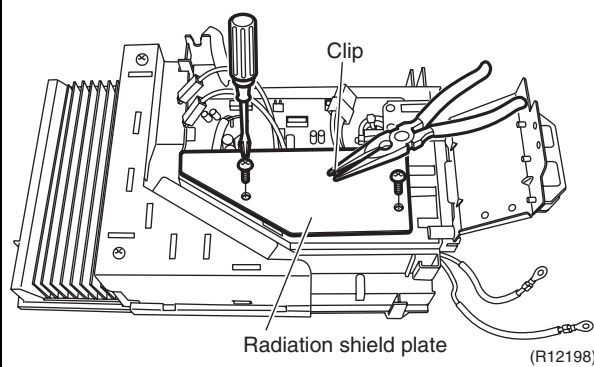
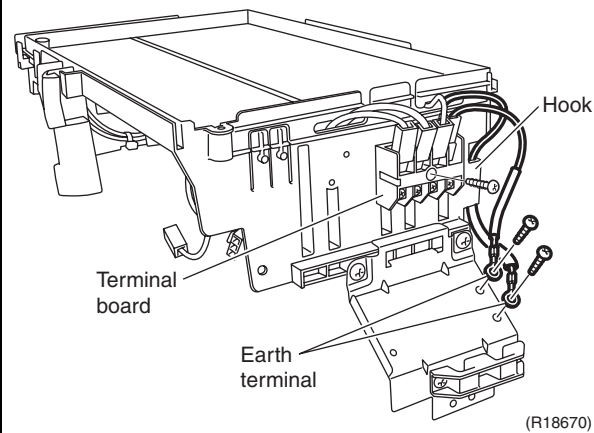
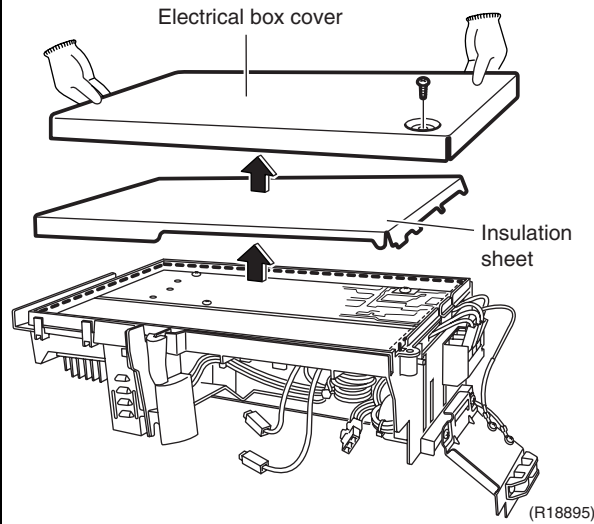
3. PCB



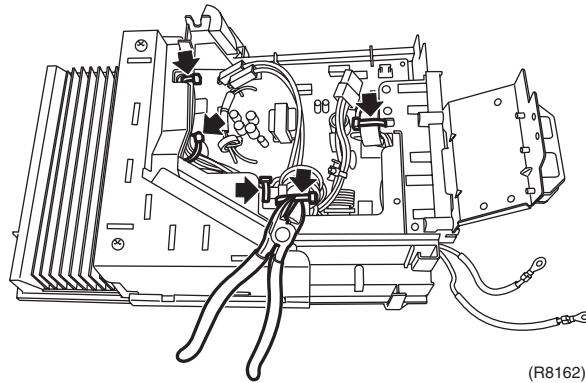
Warning

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

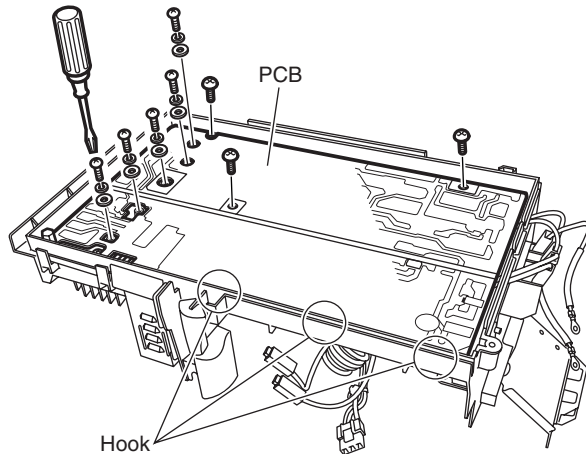
Step	Procedure	Points
1	Remove the screw and remove the electrical box cover.	■ The trimmed part goes front.
2	Detach the insulation sheet.	
3	Remove the 2 screws of the earth terminals.	
4	Release the earth wire from the hook.	
5	Remove the screw of the terminal board.	
6	Remove the 2 screws and detach the clip to remove the radiation shield plate.	



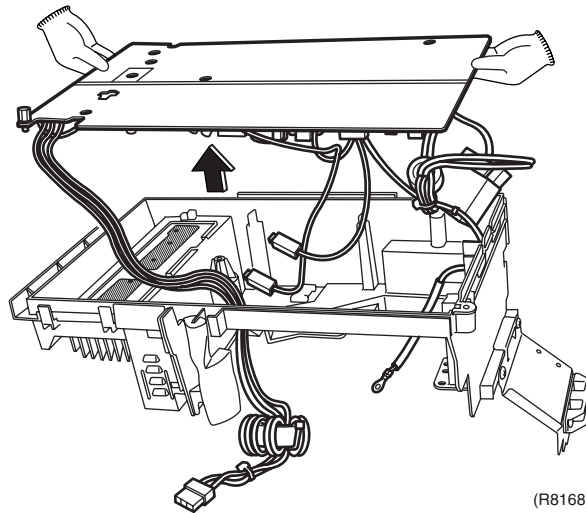
Step	Procedure	Points
7	Cut the 5 clamps and disconnect the wire harnesses.	
8	Remove the 8 screws of the PCB.	<ul style="list-style-type: none"> ■ When reassembling, make sure to fit the 3 hooks of the electrical box.
9	Lift up the back side slightly and unfasten the 3 hooks of the front.	
10	Lift up and remove the PCB.	
11	Remove the screw and remove the radiation fin.	



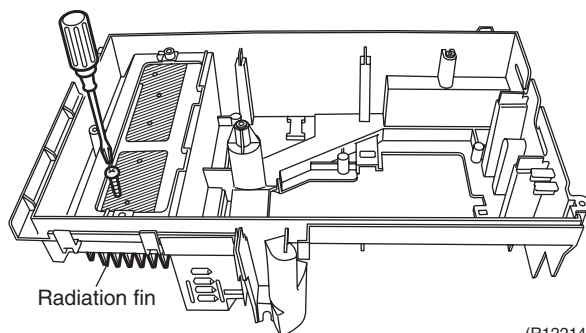
(R8162)



(R18671)



(R8168)



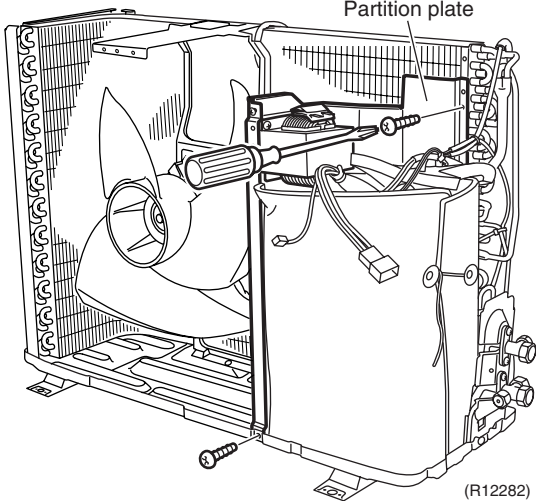
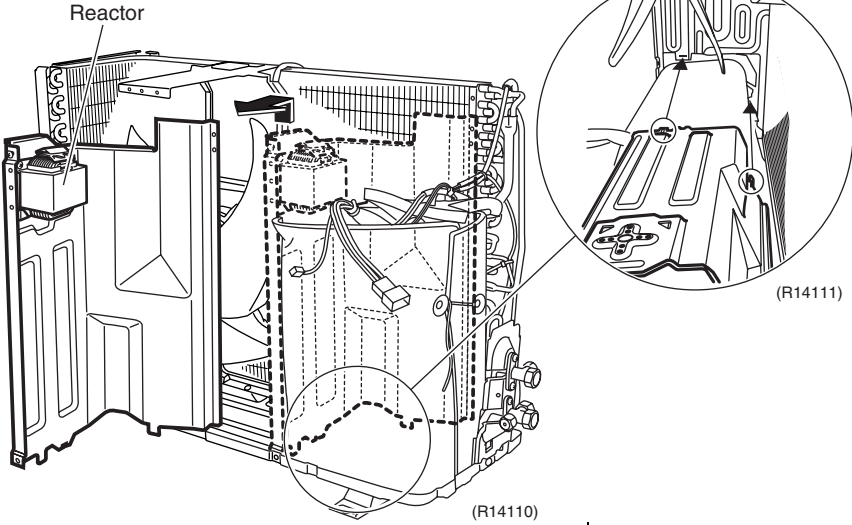
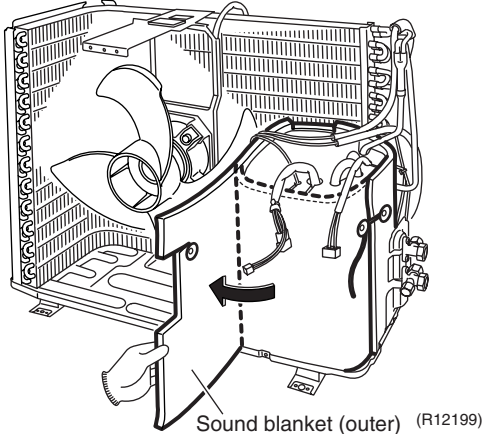
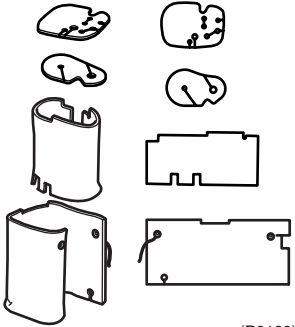
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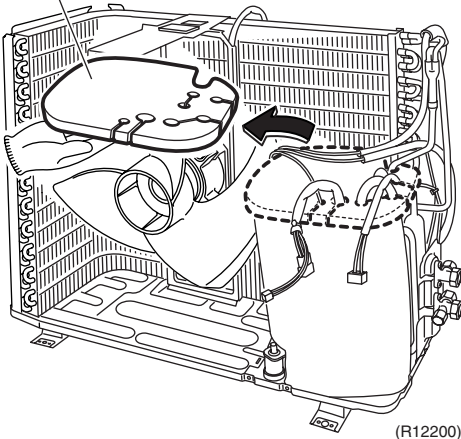
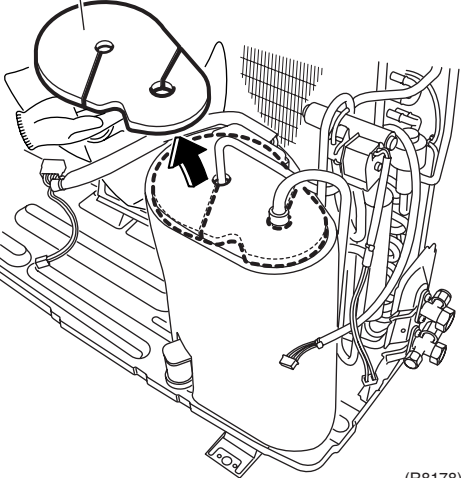
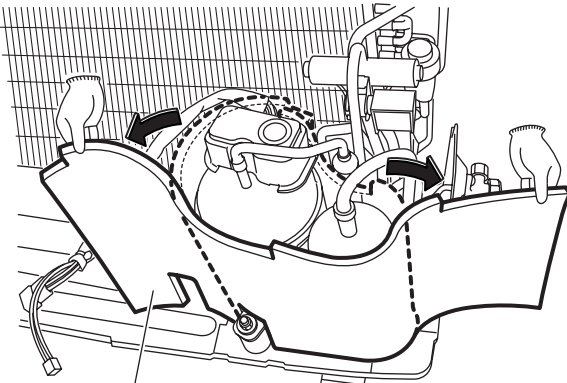
4. Partition Plate / Sound Blankets



Warning

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Step	Procedure	Points
1. Remove the partition plate.	 <p style="text-align: right;">(R12282)</p>	<p>■ When reassembling, fit the lower hooks into the bottom frame.</p>
1 Remove the 2 screws.		
2 The partition plate has hooks on the lower side. Lift and remove the partition plate.	 <p style="text-align: right;">(R14110)</p>	
3 Remove the screw to remove the reactor.		
2. Remove of the sound blanket.	 <p style="text-align: right;">(R12199)</p>	<p>■ Since the piping ports are torn easily, remove the blanket carefully.</p>  <p style="text-align: right;">(R8180)</p>
1 Remove the sound blanket (outer).		

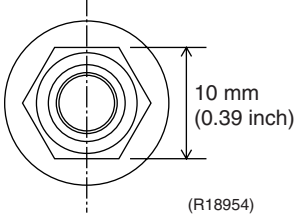
Step	Procedure	Points	Points
2	Remove the sound blanket (top upper).	<p data-bbox="560 226 810 253">Sound blanket (top upper)</p>  <p data-bbox="948 680 1015 696">(R12200)</p>	
3	Remove the sound blanket (top lower).	<p data-bbox="592 719 842 745">Sound blanket (top lower)</p>  <p data-bbox="959 1218 1015 1234">(R8178)</p>	
4	Remove the sound blanket (inner).	<p data-bbox="576 1641 783 1668">Sound blanket (inner)</p>  <p data-bbox="999 1648 1066 1664">(R12201)</p>	

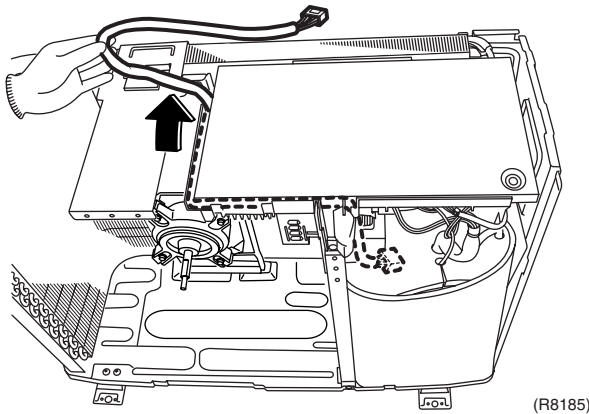
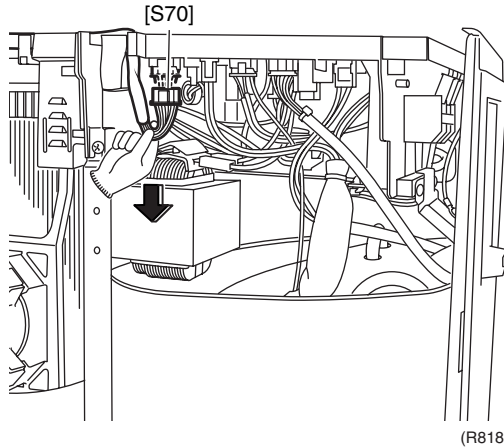
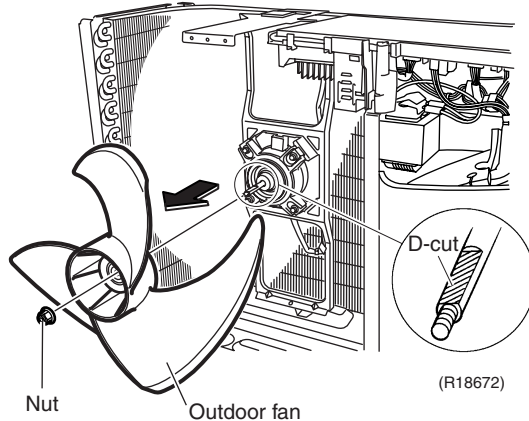
5. Outdoor Fan / Fan Motor

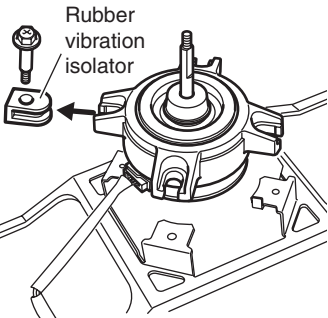


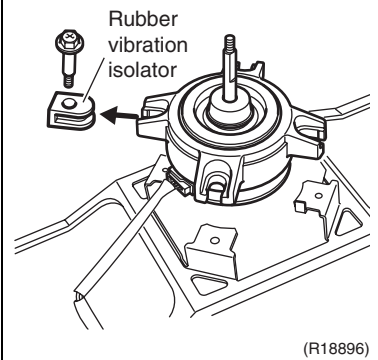
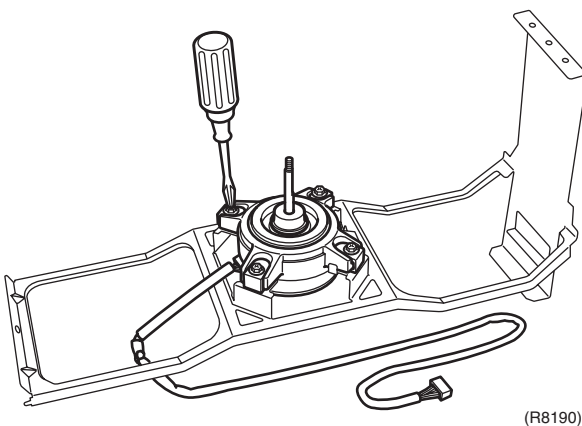
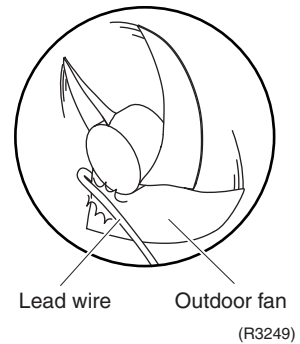
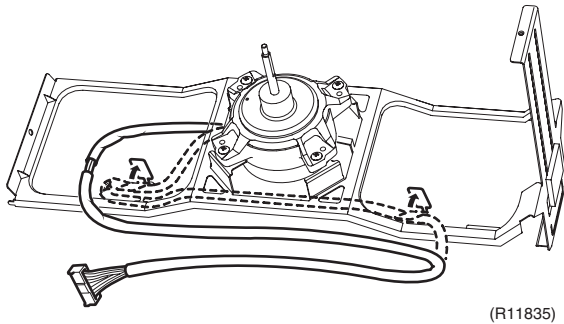
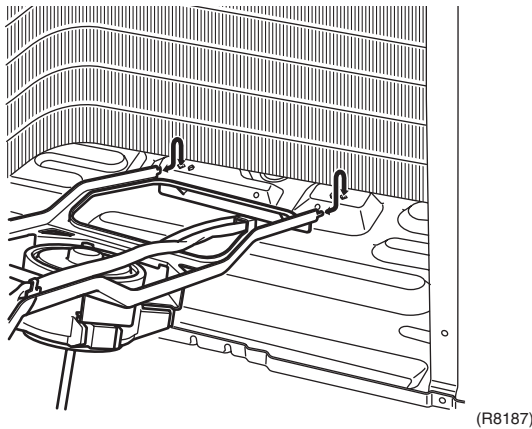
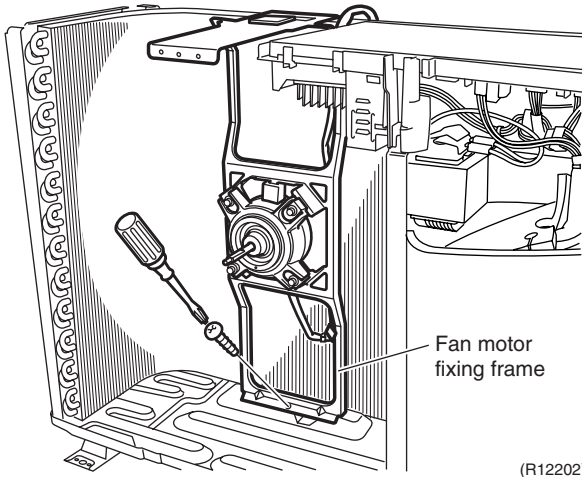
Warning

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

Step	Procedure	Points
1	Remove the nut and remove the outdoor fan.	<p>■ Nut size: M6</p>  <p>■ When reassembling, align the ▼ mark of the outdoor fan with the D-cut section of the motor shaft.</p>
2	Disconnect the connector [S70].	[S70]: fan motor
3	Release the fan motor lead wire from the hooks.	



Step	Procedure	Points
4	Remove the screw and remove the fan motor fixing frame.	<ul style="list-style-type: none"> ■ When reassembling, fit the lower hooks into the bottom frame.
5	Open the 2 hooks 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.
6	Remove the 4 screws and 4 rubber vibration isolators to remove the fan motor.	 <p>Rubber vibration isolator</p>

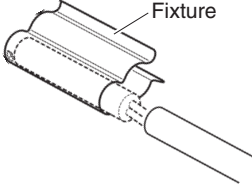


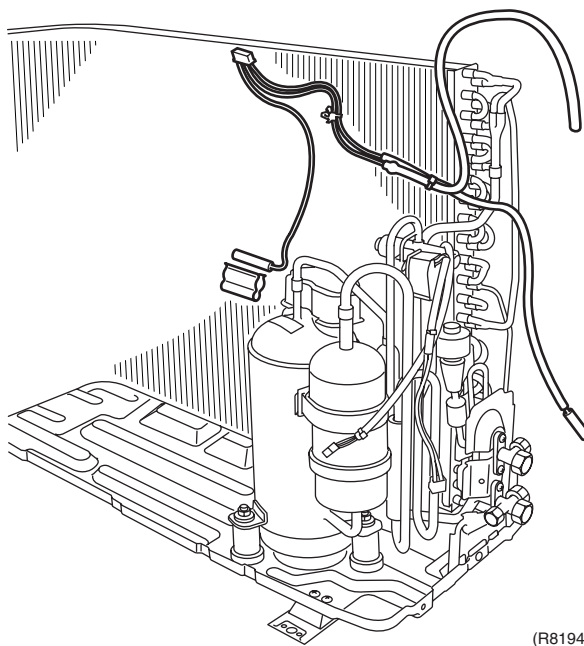
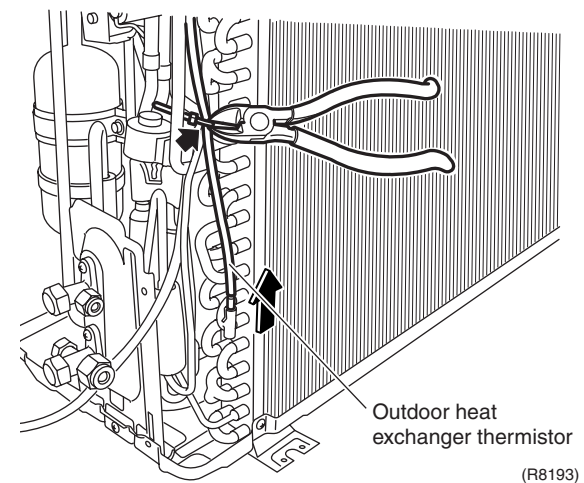
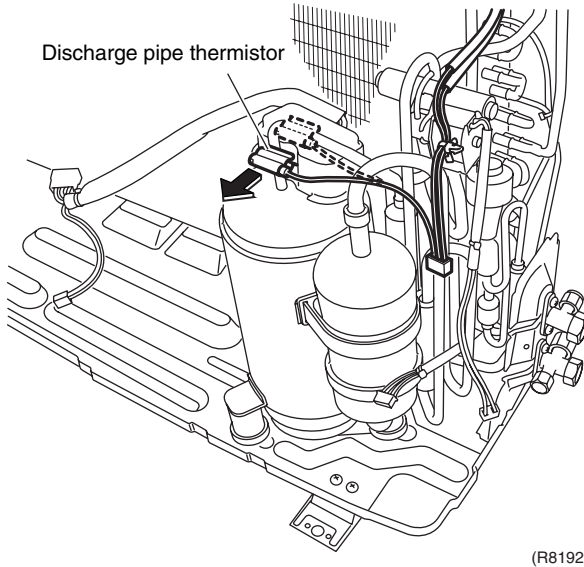
6. Thermistors



Warning

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

Step	Procedure	Points
1	Release the discharge pipe thermistor.	<p>■ Be careful not to lose the fixture for the thermistor.</p>  <p>(R18789)</p>
2	Cut the clamp and pull out the outdoor heat exchanger thermistor.	<p>■ The thermistors for outdoor temperature / discharge pipe / outdoor heat exchanger are united as one assembly.</p>



7. 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.)



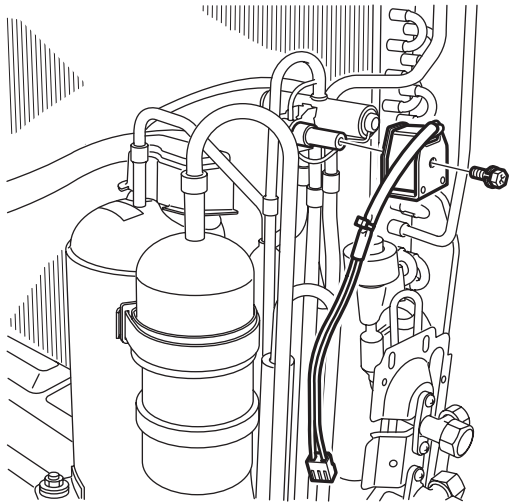
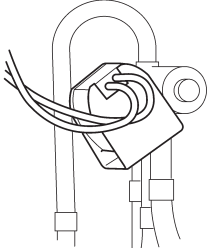
Caution

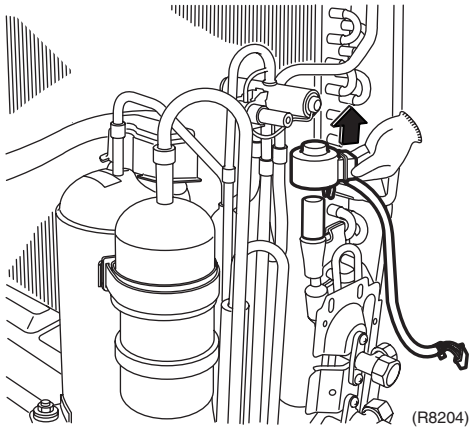
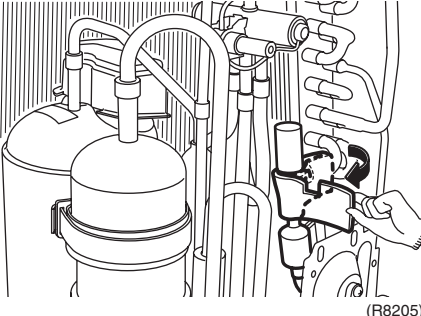
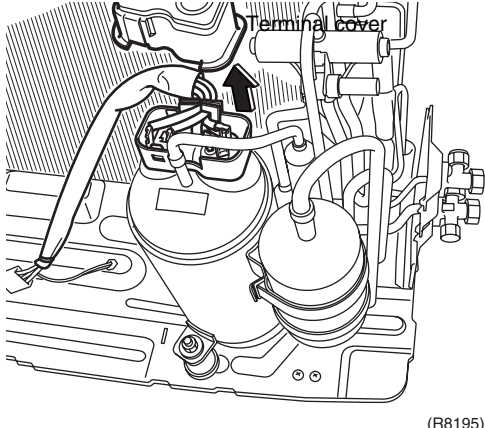
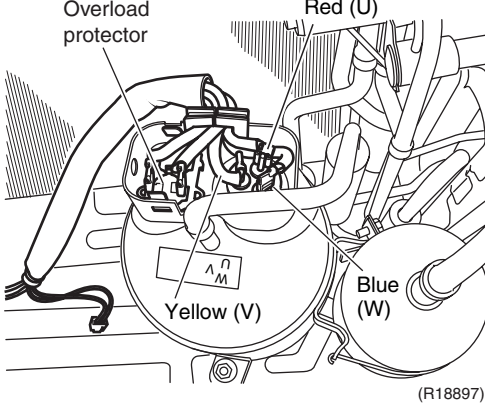
- ◆ From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.
- ◆ **Cautions for restoration**
 1. Restore the piping by non-oxidation brazing.
 2. It is required to prevent the carbonization of the oil inside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

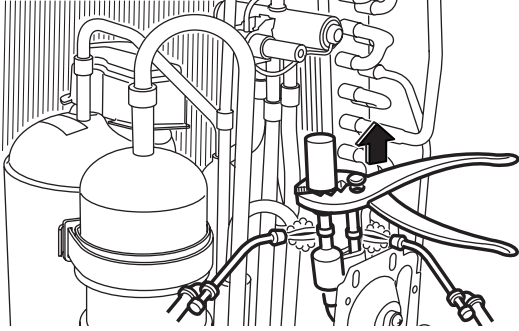
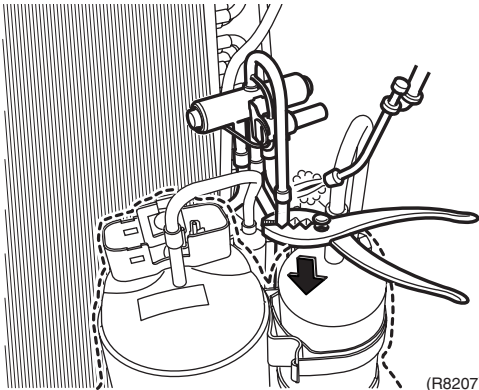


Note

- ◆ 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 peripheries. 1 Remove the screw and remove the four way valve coil.	 <p style="text-align: right;">(R18933)</p>	 <p style="text-align: center;">(R7703)</p> <ul style="list-style-type: none"> ■ Detach the four way valve coil and the 2 clamps, and then detach the wire harnesses.

Step	Procedure	Points
2	Pull out the electronic expansion valve coil.	
	 <p>(R8204)</p>	
3	Remove the putty.	
	 <p>(R8205)</p>	
4	Remove the terminal cover.	
	 <p>Terminal cover</p> <p>(R8195)</p>	
5	Disconnect the lead wires of the compressor.	
6	Unfasten the hooks with a flat screwdriver to remove the overload protector.	
	 <p>Overload protector</p> <p>Red (U)</p> <p>Yellow (V)</p> <p>Blue (W)</p> <p>(R18897)</p>	

Step	Procedure	Points
2.	Remove the four way valve and electronic expansion valve.	
1	Heat up the 2 brazed parts of the electronic expansion valve and remove it.  (R8206)	
2	Heat up the brazed parts of the four way valve.	
3	Pull the pipe with pliers and disconnect.  (R8207)	

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.



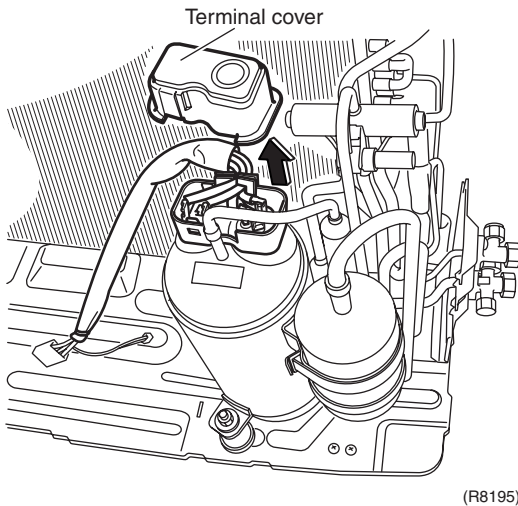
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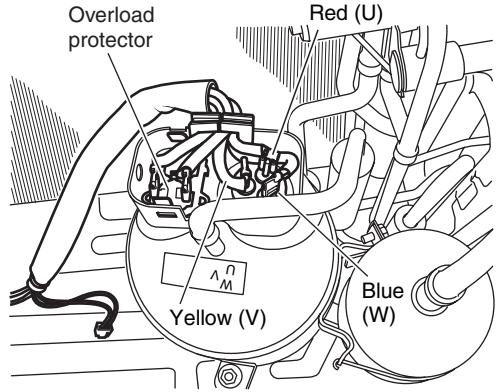
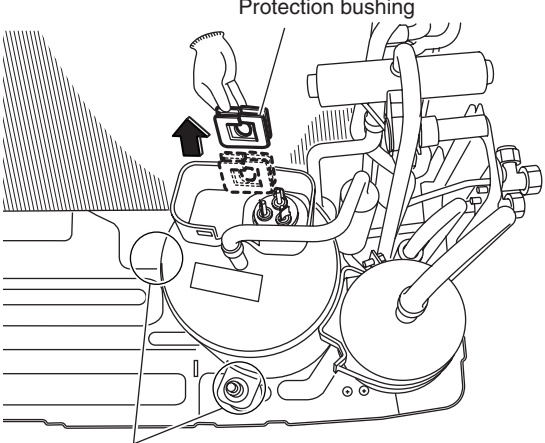
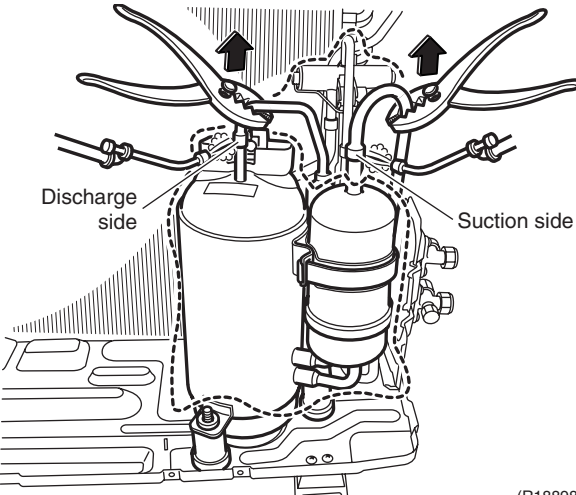
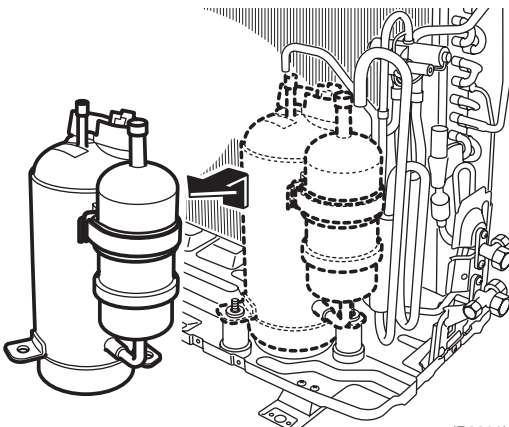
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Note

- ◆ Before working, make sure that the refrigerant gas is empty in the circuit.
- ◆ Be sure to apply nitrogen replacement when heating up the brazed part.
- ◆ Do not use a metal saw for cutting pipes by all means because the sawdust comes into the circuit.
- ◆ When withdrawing the pipes, be careful not to pinch them firmly with pliers. The pipes may get deformed.
- ◆ Provide a protective sheet or a steel plate so that the brazing flame cannot influence peripheries.
- ◆ Be careful so as not to burn the compressor terminals, the name plate, the outdoor heat exchanger fin.
- ◆ **In case of difficulty with gas brazing machine**
 1. Disconnect the brazed part where is easy to disconnect and restore.
 2. Cut pipes on the main unit with a tube cutter in order to make it easy to disconnect.

Step	Procedure	Points
1	Remove the terminal cover. 	

Step	Procedure	Procedure	Points
2	Disconnect the lead wires of the compressor.	 <p>Overload protector</p> <p>Red (U)</p> <p>Yellow (V)</p> <p>Blue (W)</p> <p>(R18897)</p>	
3	Unfasten the hooks with a flat screwdriver to remove the overload protector.		
4	Remove the protection bushing.	 <p>Protection bushing</p> <p>Nut</p> <p>(R18673)</p>	
5	Remove the 2 nuts of the compressor.		
6	Heat up the brazed part of the discharge side and disconnect.	 <p>Discharge side</p> <p>Suction side</p> <p>(R18898)</p>	
7	Heat up the brazed part of the suction side and disconnect.		
8	Lift up the compressor and remove it.	 <p>(R8202)</p>	

Revision History

Month / Year	Version	Revised contents
04 / 2013	Si001277	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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