






Si001073

REMOVAL PROCEDURE



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

1.5/2.0/2.5/3.5 kW Class 9000/12000 Btu/h Class

-  Outdoor Unit
-  Inverter
-  Pair Type



Service Manual

Removal Procedure

Outdoor Unit

●Cooling Only

RK15JEVM
RK20JEVM
RK25JEVM
RK35JEVM

RKN09JEVJU
RKN12JEVJU

RKN25JEVM
RKN35JEVM

RKS09JEVJU
RKS12JEVJU

●Heat Pump

RX20JV1B
RX25JV1B
RX35JV1B

RX25JEVM
RX35JEVM

RXN09JEVJU
RXN12JEVJU

RXN25JEV1B
RXN35JEV1B

RXS09JEVJU
RXS12JEVJU

RXP35JV2C

ARX20JV1B
ARX25JV1B
ARX35JV1B

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Note:

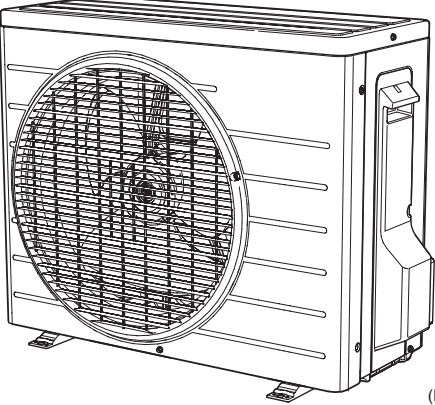
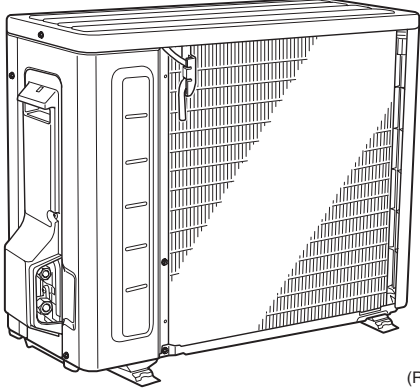
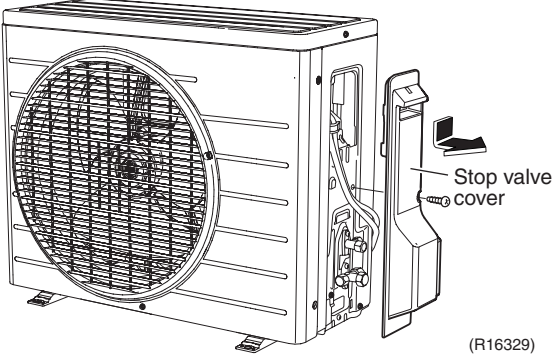
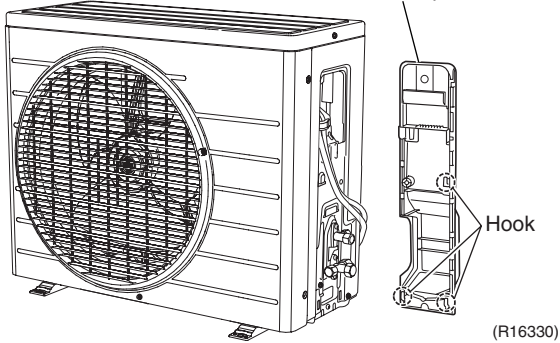
- ♦ The illustrations may be slightly different depending on the model.
- ♦ The illustrations are for heat pump models as representative.

1. Removal of Outer Panels (Pattern 1)

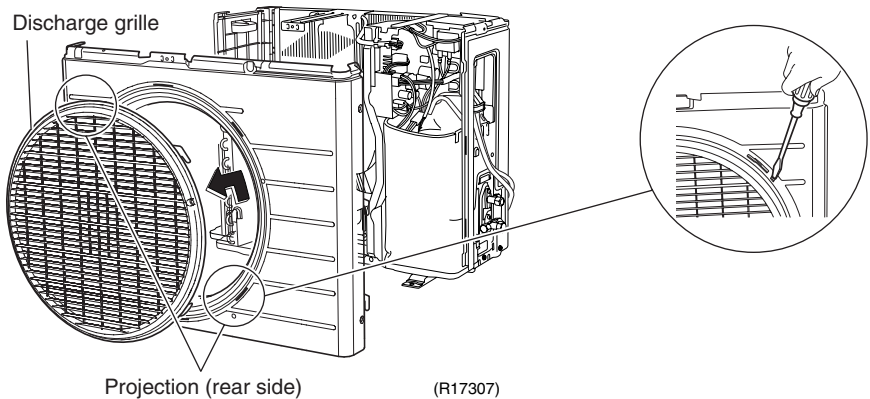
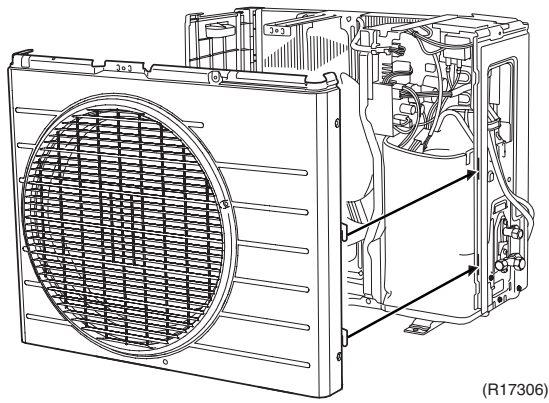
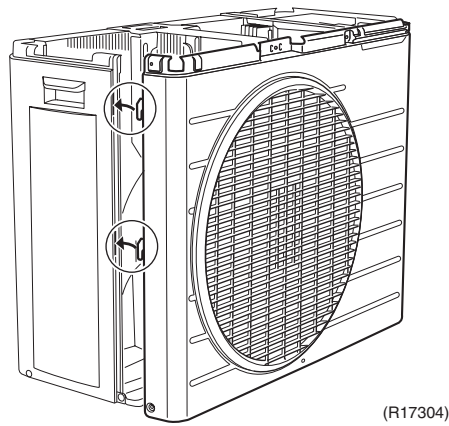
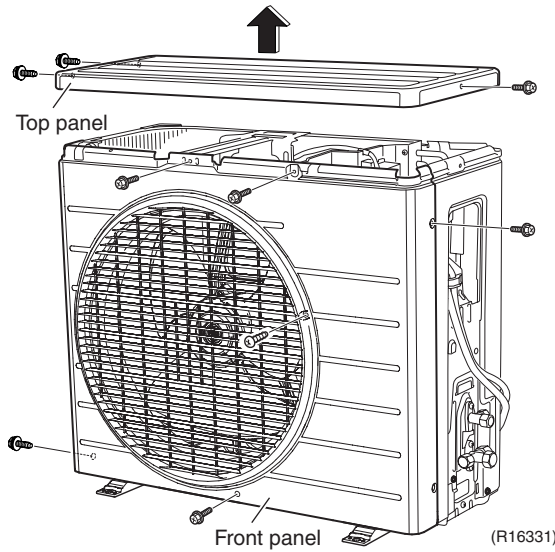
Procedure



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

Step	Procedure	Points
1. Appearance features	 <p>(R10742)</p>  <p>(R14768)</p>	<ul style="list-style-type: none"> Take care not to cut your finger by the fins of the outdoor heat exchanger.
2. Remove the panels.	<p>1 Remove the screw of the stop valve cover. Pull down the stop valve cover and remove it.</p>  <p>(R16329)</p>  <p>(R16330)</p>	<ul style="list-style-type: none"> The stop valve cover is united with the shield plate. When reassembling, make sure to fit the 3 hooks.

Step	Procedure	Points
2	Remove the 3 screws (right: 1 screw, left: 2 screws) and remove the top panel.	
3	Remove the 6 screws of the front panel.	
4	Lift up the left side and unfasten the hooks.	
5	Unfasten the right side hooks and remove the front panel.	
6	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.	

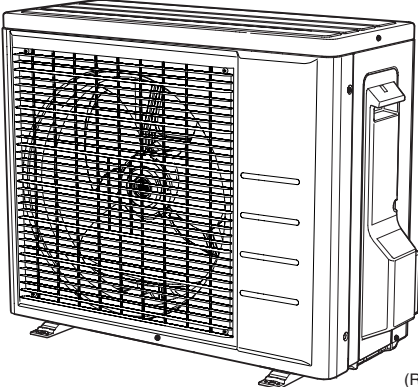
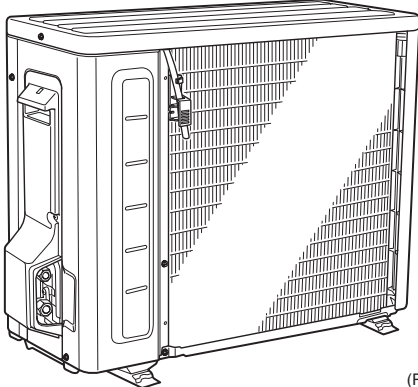
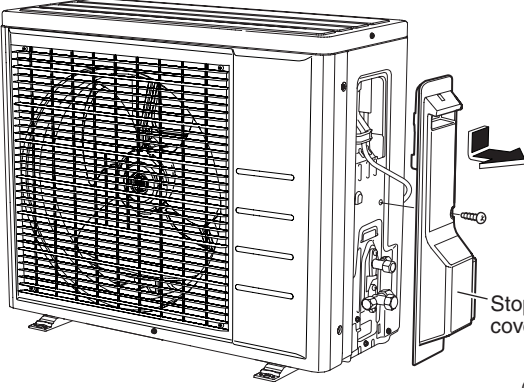
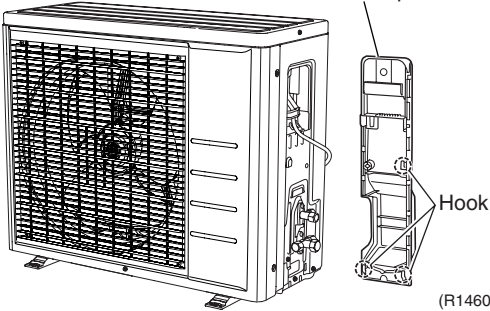


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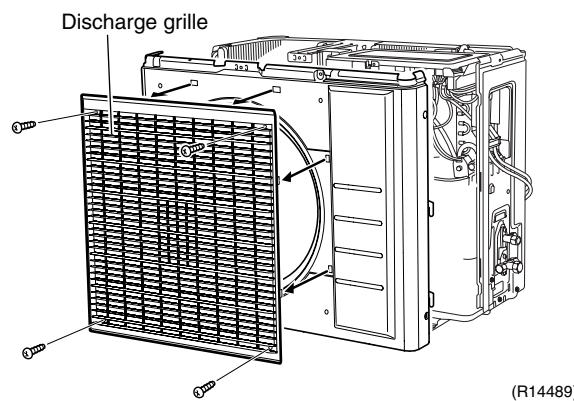
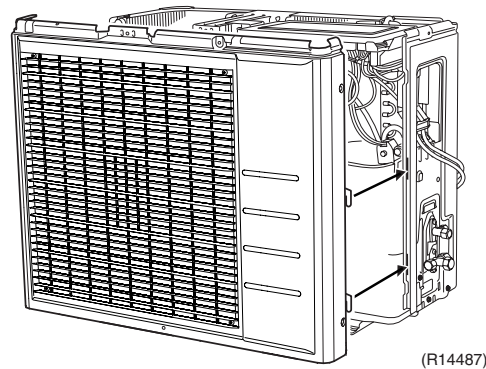
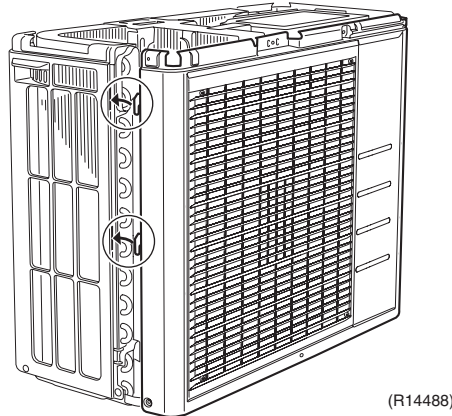
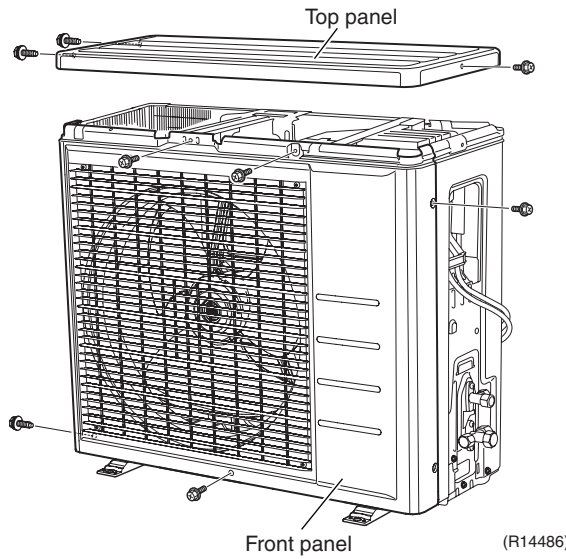
Procedure

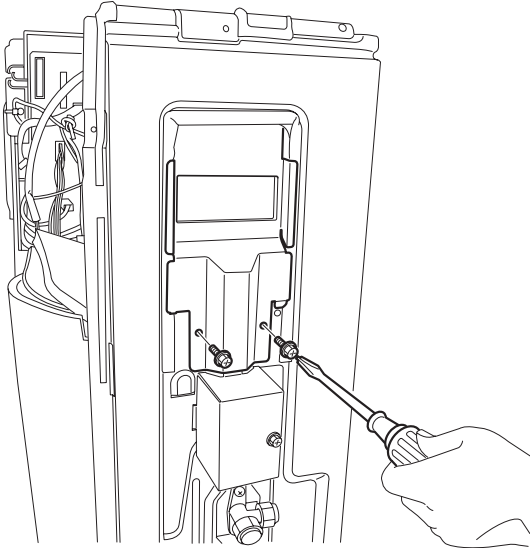
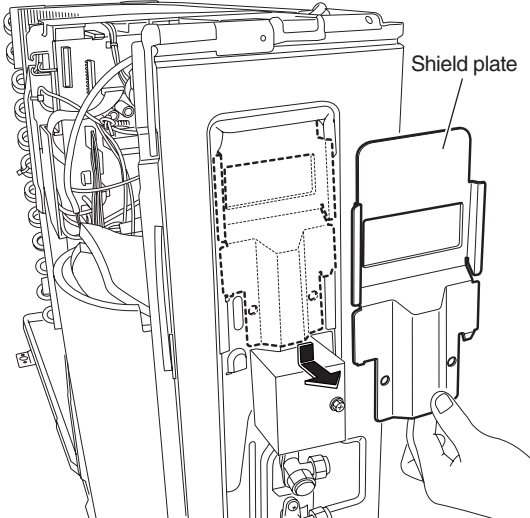
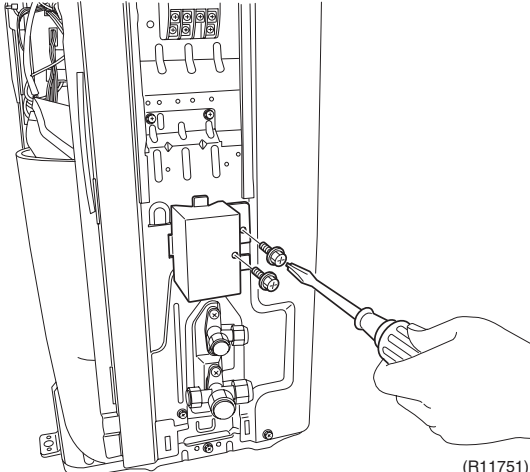


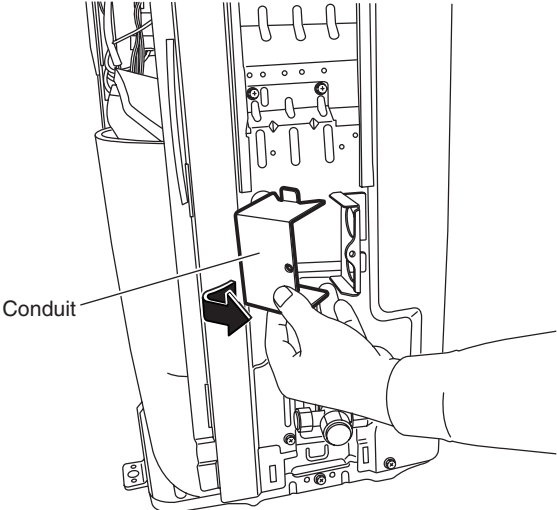
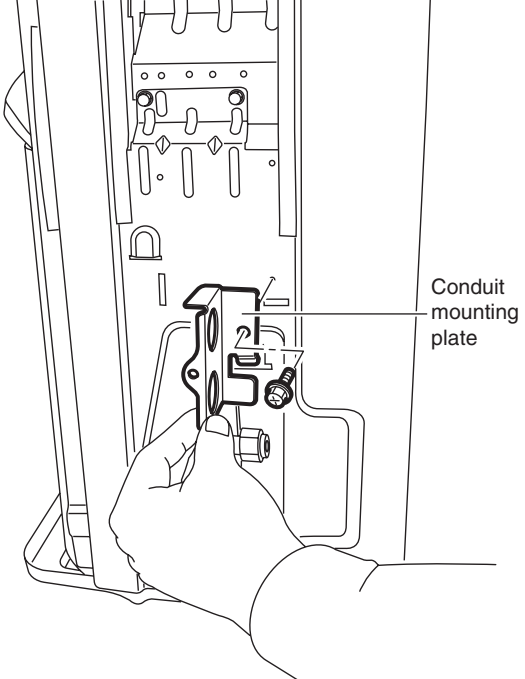
Warning Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1. Appearance features	 <p>(R10707)</p>  <p>(R14768)</p>	<ul style="list-style-type: none"> Take care not to cut your finger by the fins of the outdoor heat exchanger.
2. Remove the panels.	<p>1 Remove the screw of the stop valve cover. Pull down the stop valve cover and remove it.</p>  <p>(R10709)</p>  <p>Shield plate</p> <p>Hook</p> <p>(R14606)</p>	<ul style="list-style-type: none"> The stop valve cover is united with the shield plate. When reassembling, make sure to fit the 3 hooks.

Step	Procedure	Points
2	Remove the 3 screws (right: 1 screw, left: 2 screws) and remove the top panel.	
3	Remove the 5 screws of the front panel.	
4	Lift up the left side and unfasten the hooks.	
5	Unfasten the right side hooks and remove the front panel.	
6	Remove the 4 screws of the discharge grille.	
7	Unfasten the 6 hooks and remove the discharge grille.	



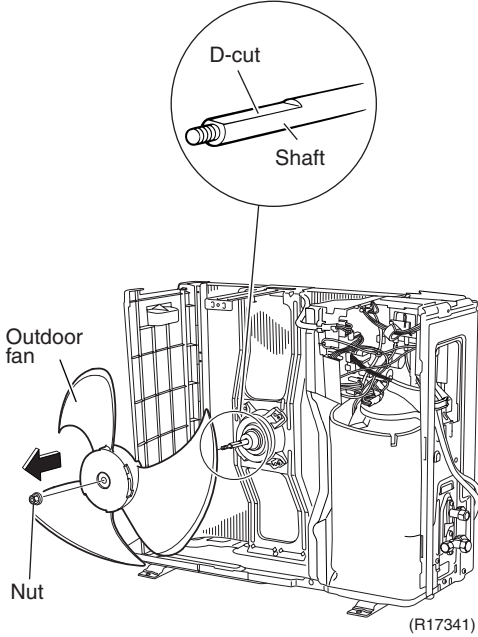
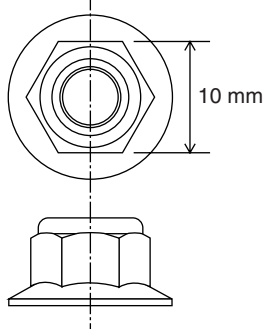
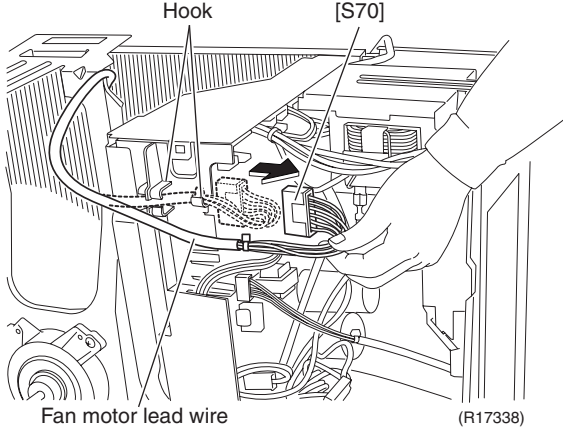
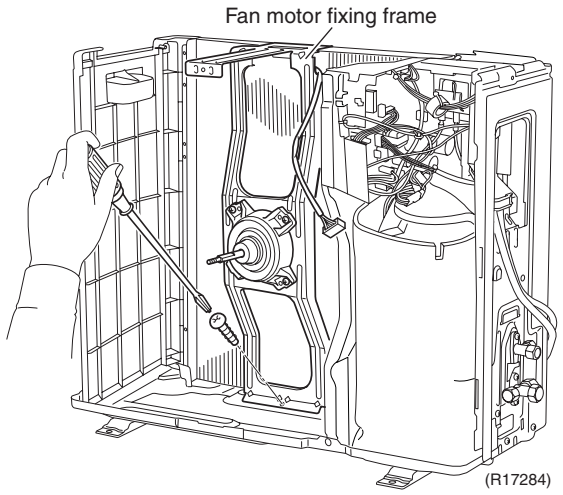
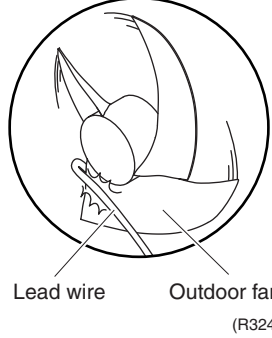
Step	Procedure	Points
3.	Remove the shield plate and the conduit (The U.S. models only).	
1	Remove the 2 screws.  (R11749)	
2	Remove the shield plate.  (R11750)	
3	Remove the 2 screws.  (R11751)	

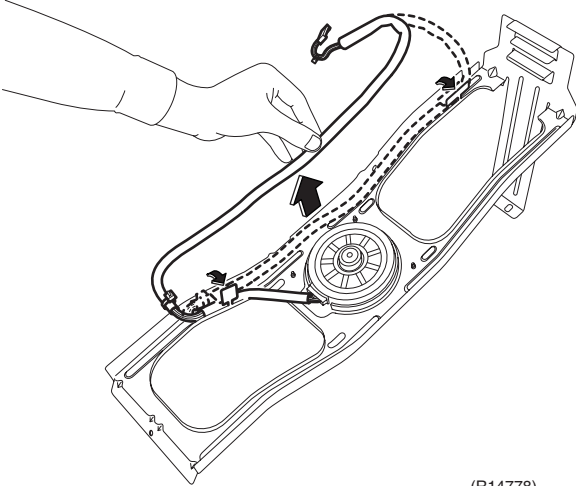
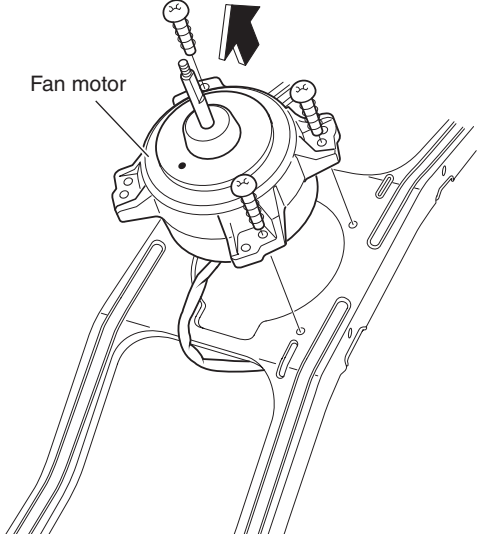
Step		Procedure	Points
4	Remove the conduit.	 <p>(R11752)</p>	
5	Remove the conduit mounting plate.	 <p>(R11753)</p>	

3. Removal of Outdoor Fan / Fan Motor

Procedure

 **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 outdoor fan.		<p>Preparation</p> <ul style="list-style-type: none"> Remove the panels according to the "Removal of Outer Panels". Nut size: M6  <ul style="list-style-type: none"> When reassembling, align the ▼ mark of the outdoor fan with the D-cut section of the motor shaft.
2. Remove the fan motor.	 	<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. 

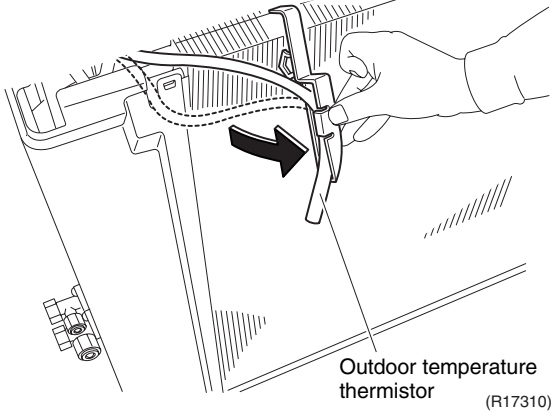
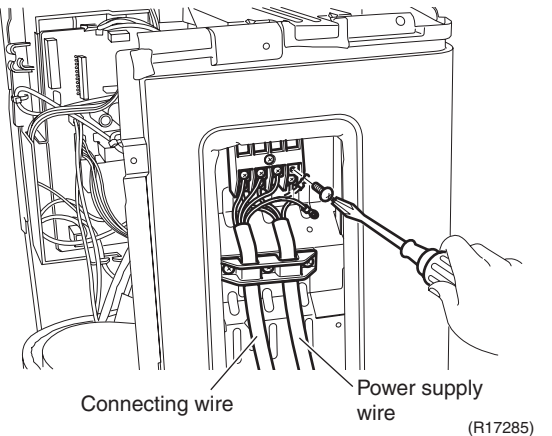
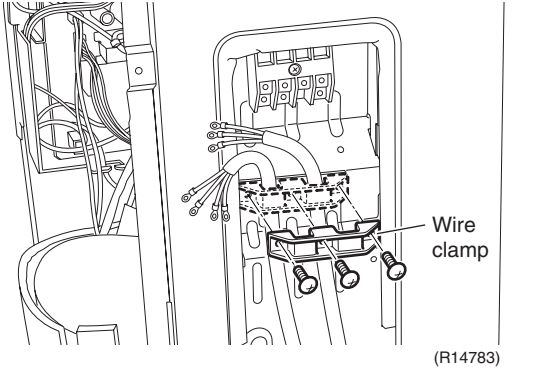
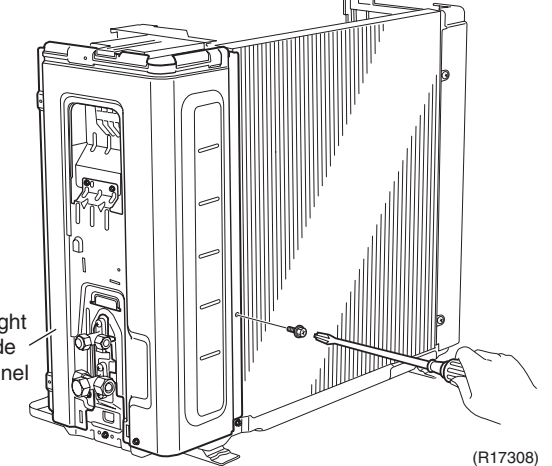
Step	Procedure	Points
4	<p data-bbox="201 215 459 304">Release the fan motor lead wire from the hooks.</p>  <p data-bbox="967 719 1034 741">(R14778)</p>	
5	<p data-bbox="201 757 451 846">Remove the 3 screws to remove the fan motor.</p>  <p data-bbox="571 920 671 943">Fan motor</p> <p data-bbox="935 1402 1002 1424">(R14779)</p>	

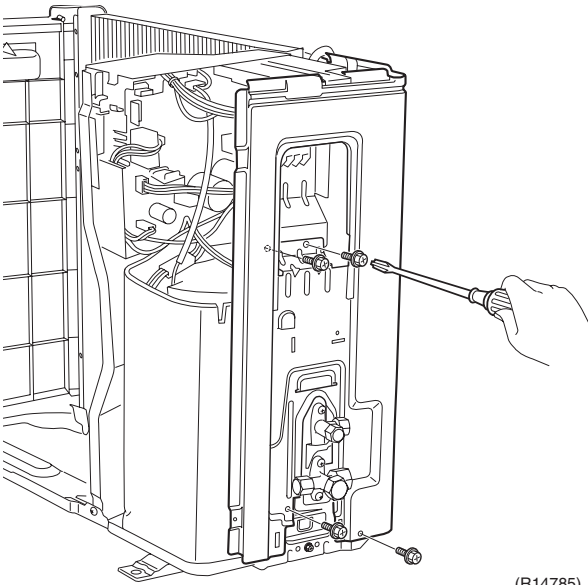
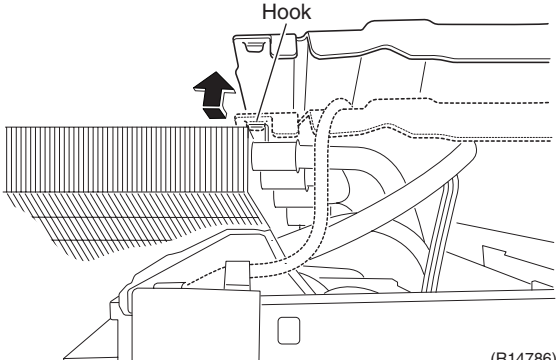
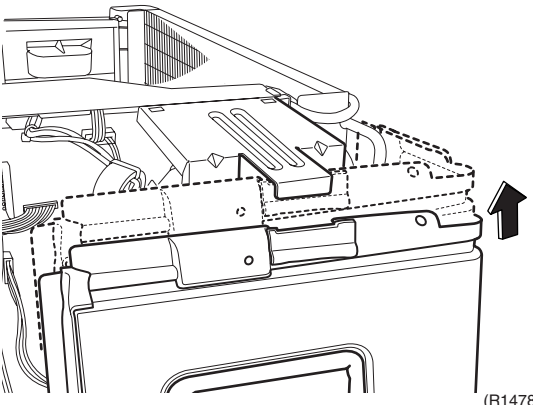
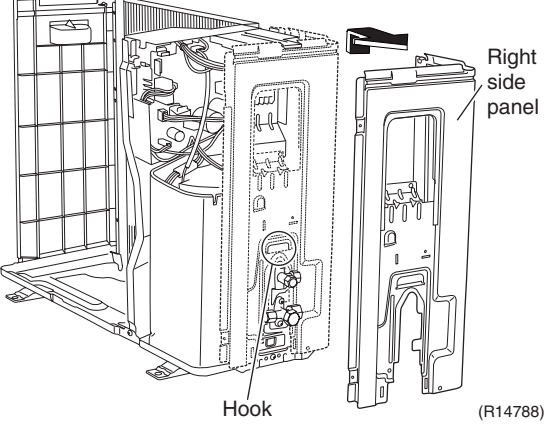
4. Removal of Electrical Box / PCBs

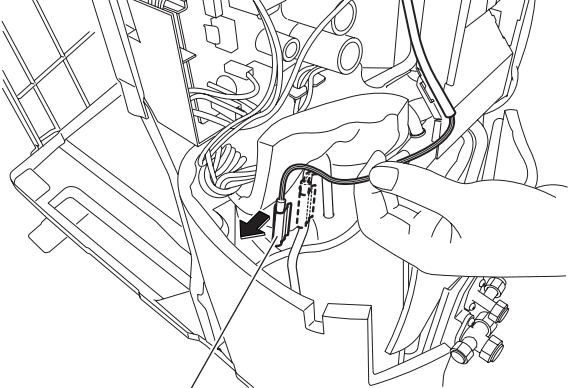
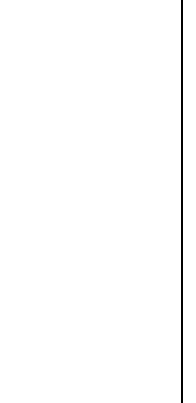
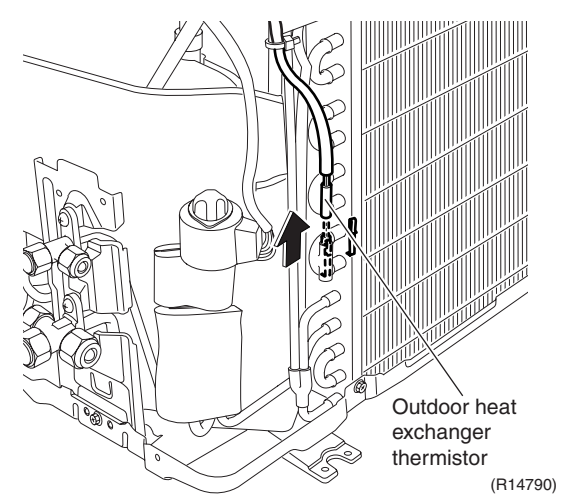
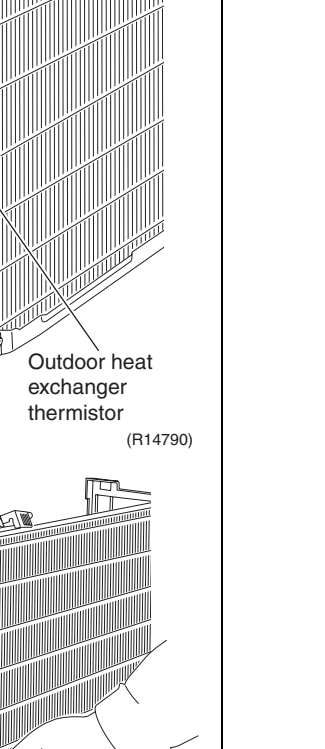
Procedure

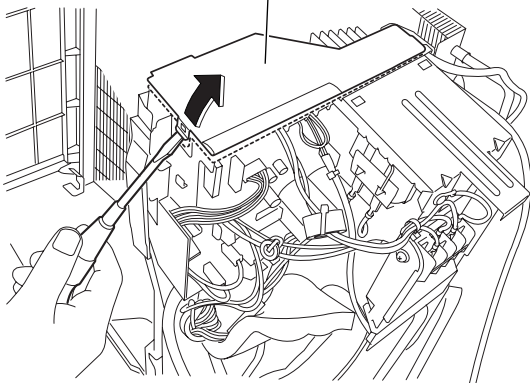
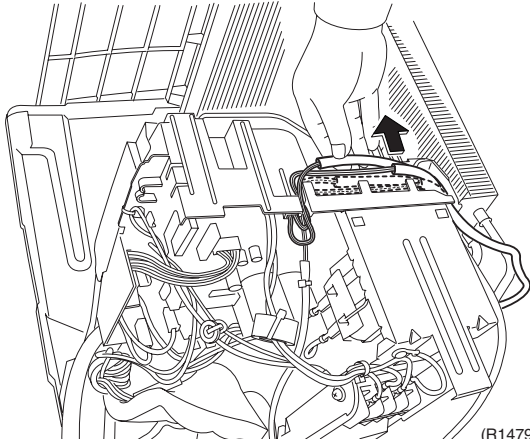
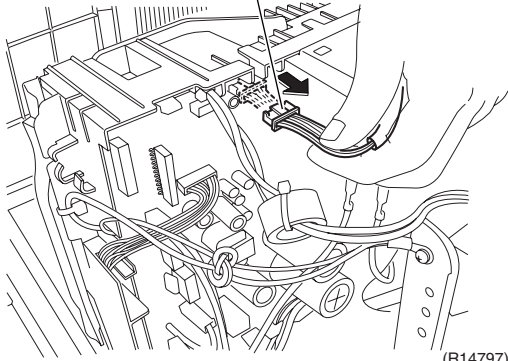
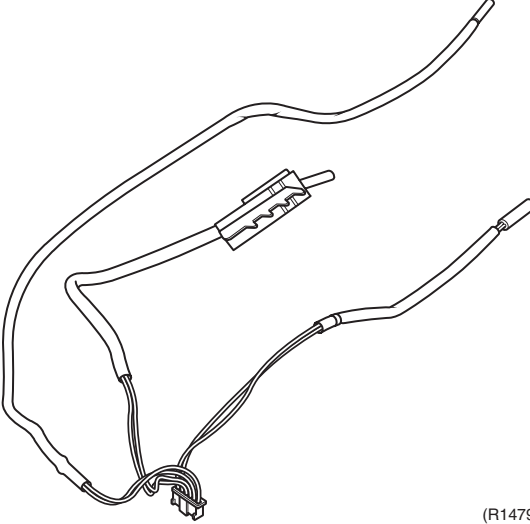


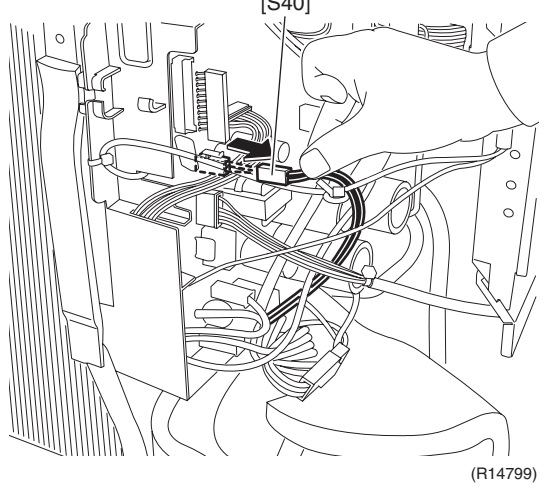
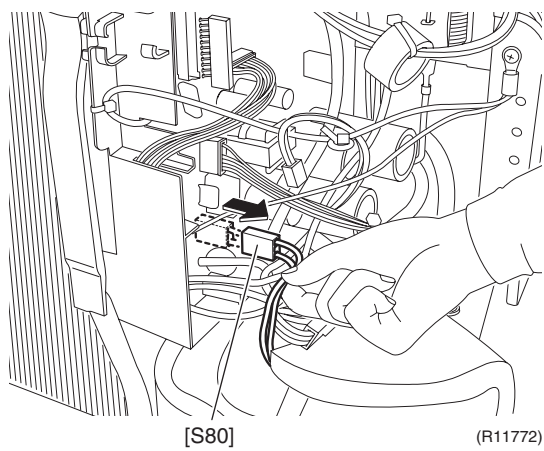
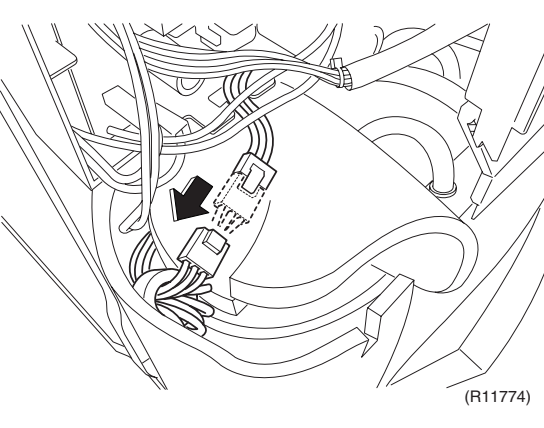
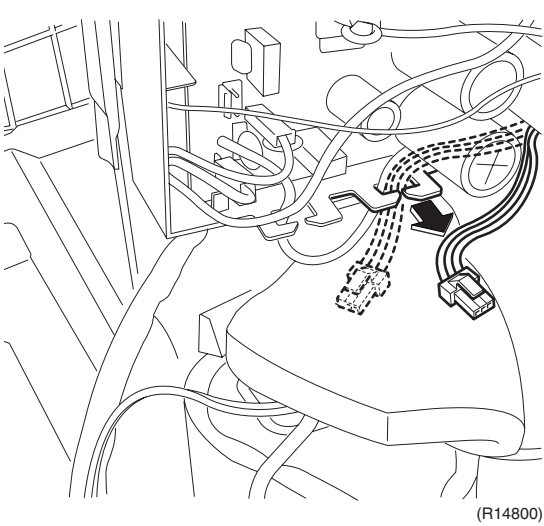
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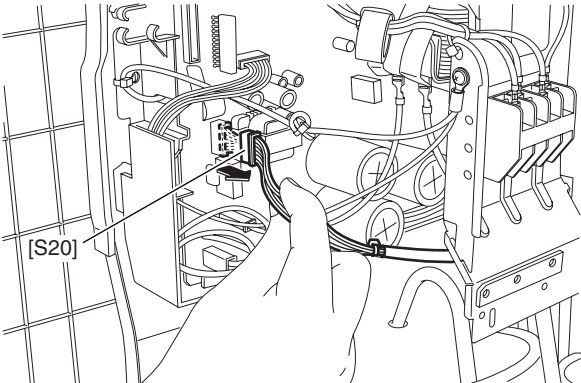
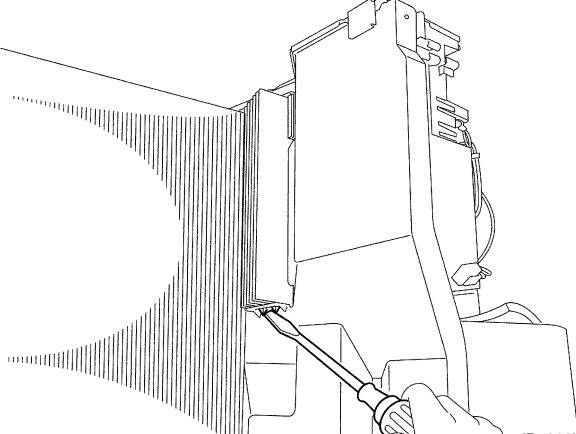
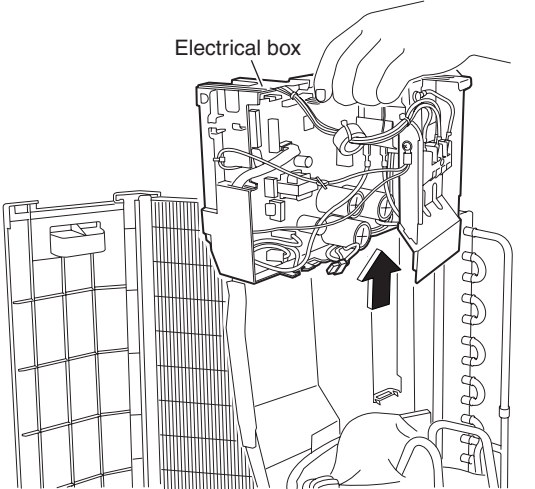
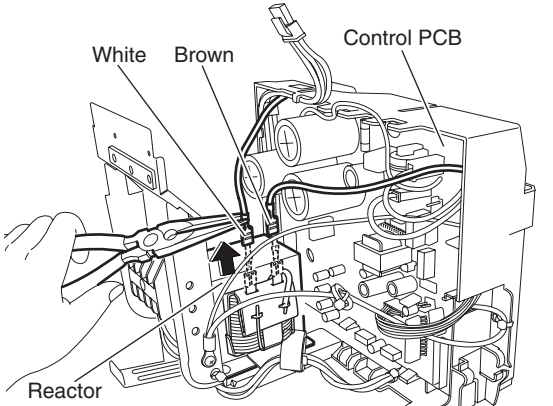
Step	Procedure	Points
1. Remove the right side panel.	 <p>Outdoor temperature thermistor (R17310)</p>	<p>Preparation</p> <ul style="list-style-type: none"> Remove the panels according to the "Removal of Outer Panels".
1 Release the outdoor temperature thermistor.	 <p>Connecting wire Power supply wire (R17285)</p>	
2 Remove the screws and release the connecting wire and the power supply wire.	 <p>Wire clamp (R14783)</p>	
3 Remove the 3 screws and remove the wire clamp.	 <p>Right side panel (R17308)</p>	
4 Remove the screw on the rear side of the right side panel.		

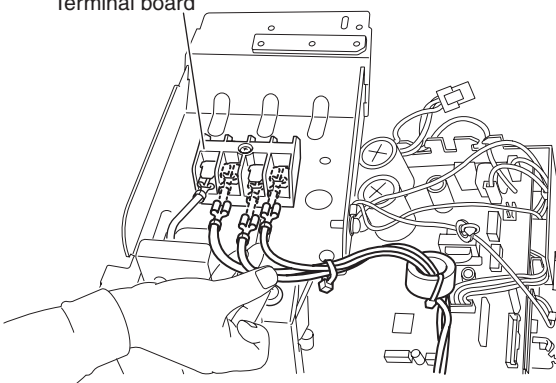
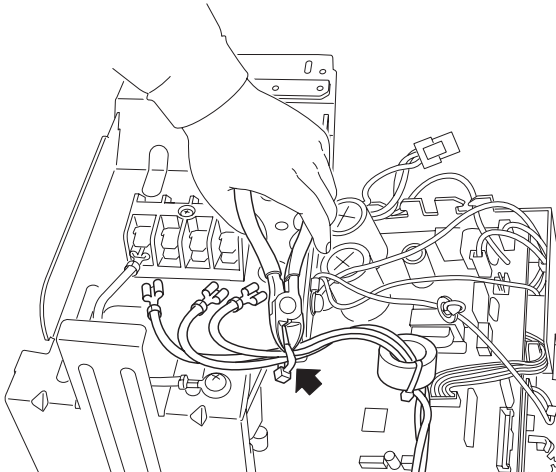
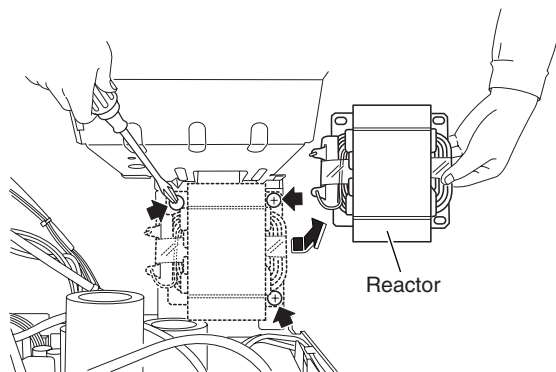
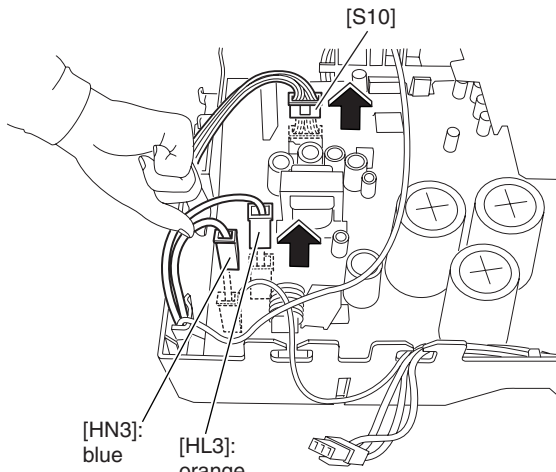
Step	Procedure	Points
5	<p>Remove the 4 screws on the right side panel.</p> 	
6	<p>Unfasten the hook on the rear side.</p> 	<p>■ When reassembling, make sure to fit the hook.</p>
7	<p>Unfasten the hook above the electrical box.</p> 	
8	<p>Unfasten the hook, and remove the right side panel.</p> 	

Step	Procedure	Points
2. Remove the thermistors.		
1	<p>Release the discharge pipe thermistor.</p>  <p>Discharge pipe thermistor (R14789)</p>	<ul style="list-style-type: none"> ■ Pay attention so as not to lose the fixture for thermistor. ■ When reassembling, do not insert the thermistor up to the dent of fixture.  <p>(R11740)</p>
2	<p>Release the outdoor heat exchanger thermistor.</p>  <p>Outdoor heat exchanger thermistor (R14790)</p>	
3	<p>Cut the clamp.</p>  <p>(R14792)</p>	

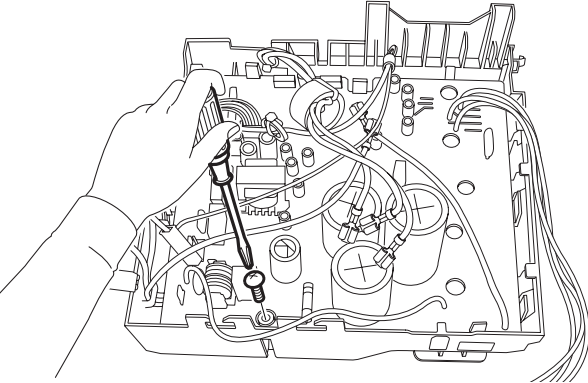
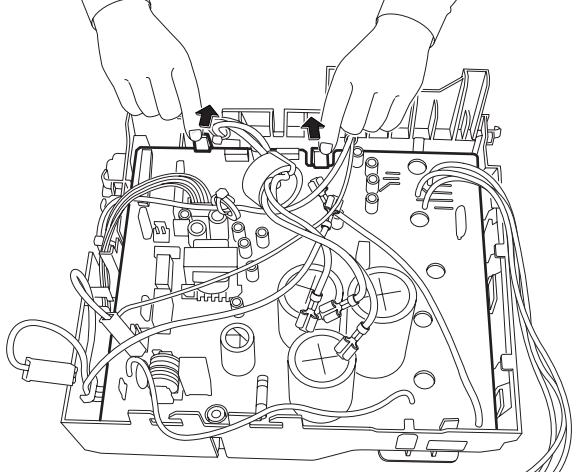
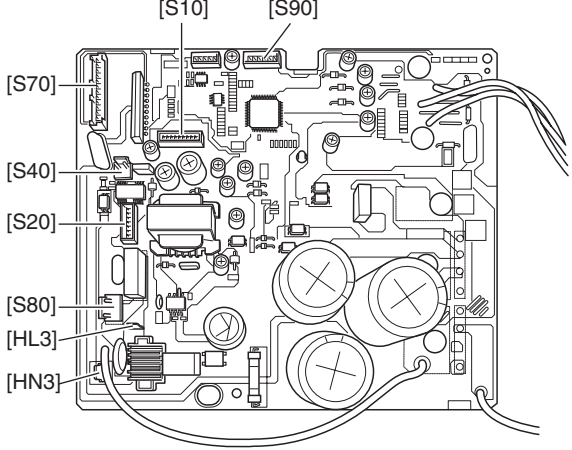
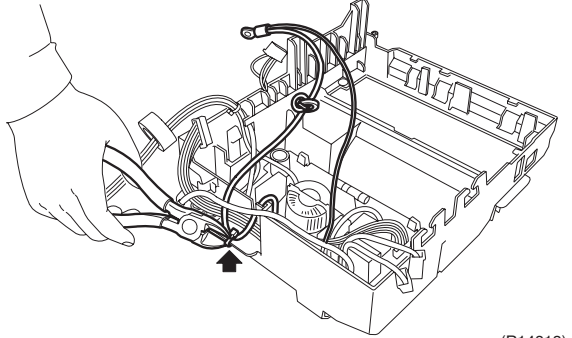
Step	Procedure	Points	
4	Lift the hook with a flat screwdriver, and remove the electronic components mounting plate.	<p data-bbox="603 226 970 253">Electronic components mounting plate</p>  <p data-bbox="995 651 1062 674">(R14795)</p>	
5	Release the harnesses.	 <p data-bbox="995 1115 1062 1137">(R14796)</p>	
6	Disconnect the connector for the thermistors [S90].	<p data-bbox="751 1160 802 1187">[S90]</p>  <p data-bbox="970 1563 1037 1585">(R14797)</p>	<p data-bbox="1098 1149 1453 1305">[S90]: outdoor temperature thermistor, outdoor heat exchanger thermistor, discharge pipe thermistor</p>
7	Remove the thermistor ASSY.	 <p data-bbox="995 2107 1062 2130">(R14798)</p>	

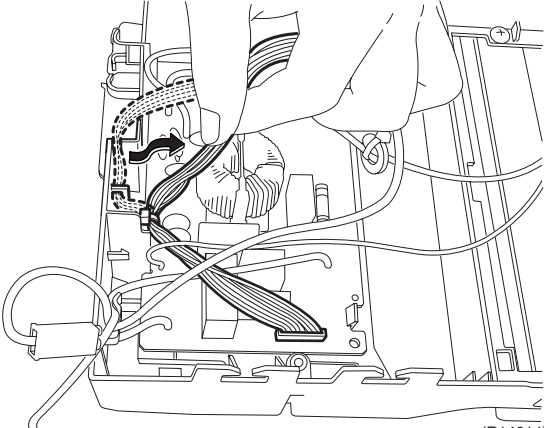
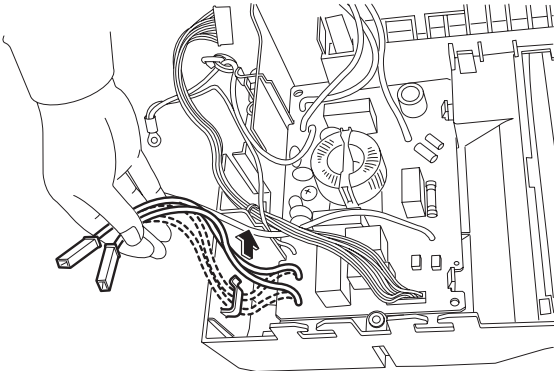
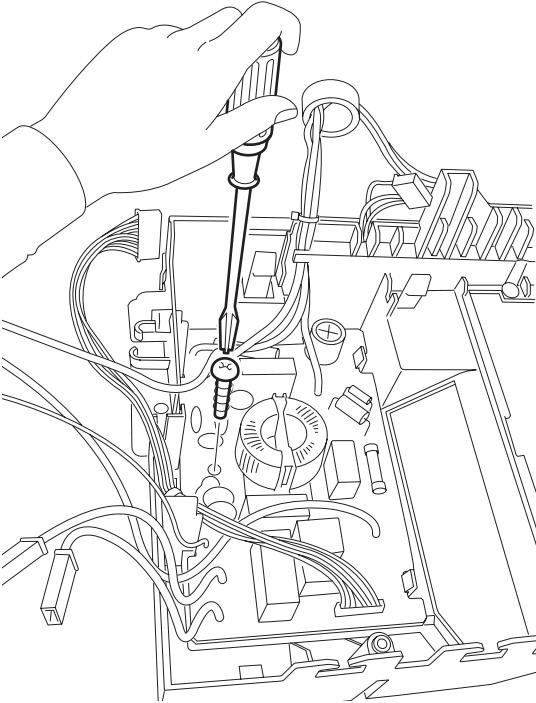
Step	Procedure	Points
3.	Remove the electrical box.	
1	Disconnect the connector for the overload protector [S40].	 <p>[S40]</p> <p>(R14799)</p>
2	Disconnect the connector for the four way valve coil [S80].	 <p>[S80]</p> <p>(R11772)</p>
3	Disconnect the relay connector for the compressor motor.	 <p>(R11774)</p>
4	Release the harnesses from the hook.	 <p>(R14800)</p>

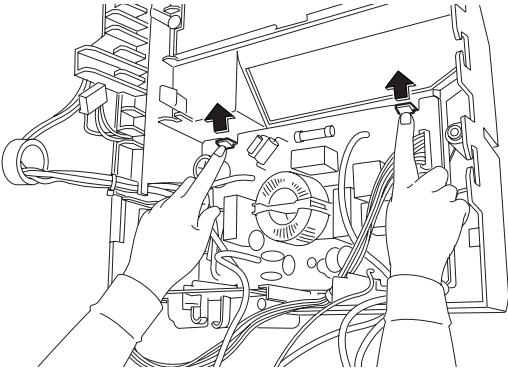
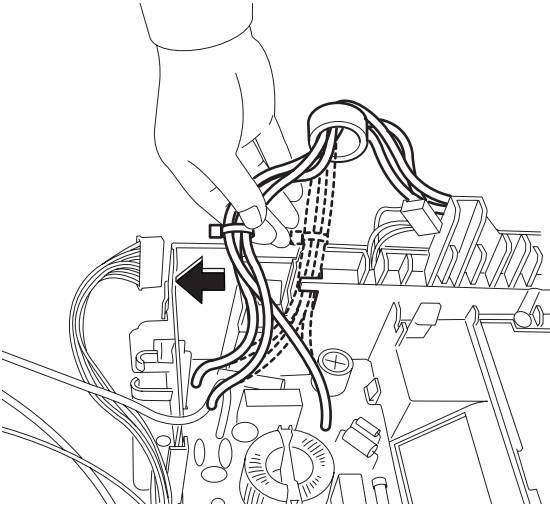
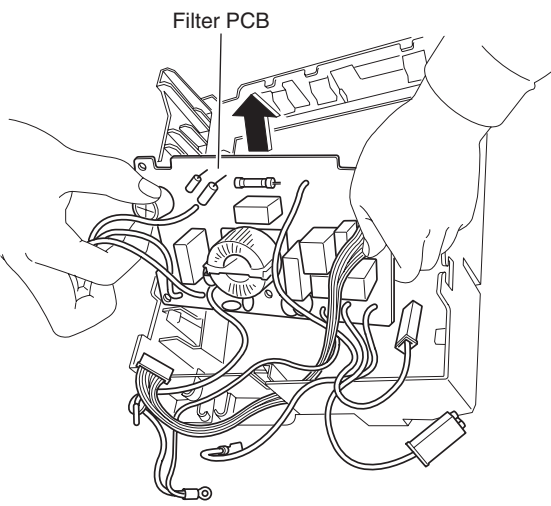
Step	Procedure	Points
<p>5 Disconnect the connector for the electronic expansion valve coil [S20].</p> <p>6 Unfasten the hook of the electrical box from the partition plate with a flat screwdriver.</p> <p>7 Lift and remove the electrical box.</p>	 <p>(R14801)</p>  <p>(R7318)</p>  <p>Electrical box</p> <p>(R14802)</p>	<p>■ The electrical box can be removed without a screwdriver.</p>
<p>4. Remove the control PCB.</p> <p>1 Disconnect the 2 terminals of the reactor.</p>	 <p>White Brown Control PCB</p> <p>Reactor</p> <p>(R14803)</p>	

Step	Procedure	Points
2	Pull out the terminals from the terminal board.	Terminal board  (R14804)
3	Cut the clamp.	 (R14805)
4	Remove the 3 screws and remove the reactor.	 Reactor (R11777)
5	Disconnect the 3 connectors for the filter PCB [S10] [HN3] [HL3].	 [S10] [HN3]: blue [HL3]: orange (R17309)

Step	Procedure	Points
6	Release the harnesses.	(R11782)
7	Remove the 5 screws of the control PCB.	(R14808)
8	Remove the screw of the earth wire.	(R14809)
9	Remove the plate with a flat screwdriver.	(R14810)

Step	Procedure	Procedure	Points
10	Remove the screw.	 <p>(R14811)</p>	
11	Unfasten the 2 hooks.	 <p>(R14812)</p>	
12	Lift and remove the control PCB.	 <p>(R11784)</p>	<p>[S10] [HN3] [HL3]: filter PCB [S20]: electronic expansion valve coil [S40]: overload protector [S70]: fan motor [S80]: four way valve coil [S90]: thermistors</p>
5.	Remove the filter PCB.	 <p>(R14813)</p>	
1	Cut the clamp.		

Step	Procedure	Points
2	<p data-bbox="201 215 467 275">Release the harnesses from the hooks.</p>  <p data-bbox="991 658 1058 680">(R14814)</p>  <p data-bbox="1002 1106 1069 1128">(R14815)</p>	
3	<p data-bbox="201 1144 424 1173">Remove the screw.</p>  <p data-bbox="991 1910 1058 1933">(R14816)</p>	

Step	Procedure	Points
4	Unfasten the 2 hooks.	
		
	(R14817)	
5	Release the harnesses.	
		
	(R14818)	
6	Remove the filter PCB.	
		
	(R14819)	

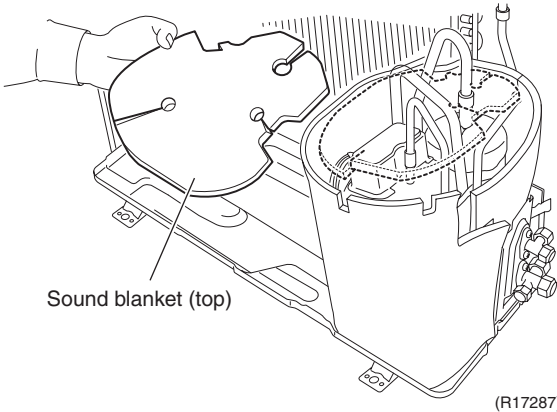
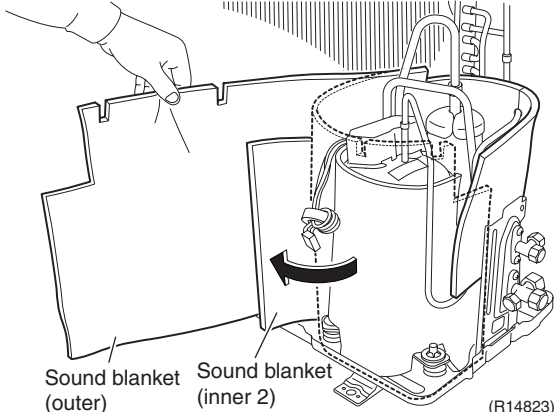
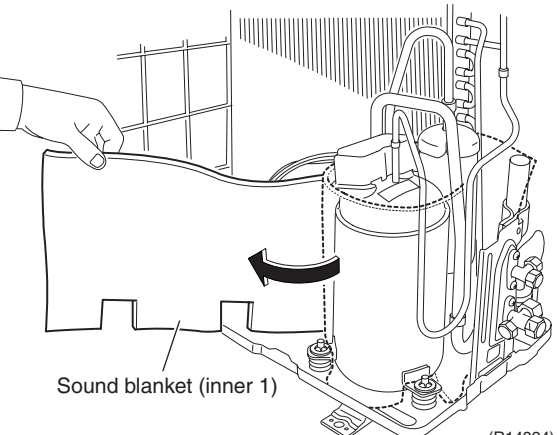
5. Removal of Sound Blankets

Procedure



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 partition plate.	<p>(R17286)</p>	<ul style="list-style-type: none"> Some models have 3 screws.
1 Remove the 2 screws.	<p>(R14821)</p>	<ul style="list-style-type: none"> When reassembling, fit the lower hook into the bottom frame.
2 The partition plate has a hook on the lower side. Lift and pull the partition plate and remove it.		

Step	Procedure	Points
2. Remove the sound blankets.		
1 Lift and remove the sound blanket (top).	 <p style="text-align: right;">(R17287)</p>	<ul style="list-style-type: none"> ■ Since the piping ports on the sound blanket are torn easily, remove the blanket carefully.
2 Pull the sound blankets (outer and inner 2) out.	 <p style="text-align: right;">(R14823)</p>	<ul style="list-style-type: none"> ■ Some models have no sound blanket (inner 2).
3 Pull the sound blanket (inner 1) out.	 <p style="text-align: right;">(R14824)</p>	

6. Removal of Electronic Expansion Valve ASSY

Procedure



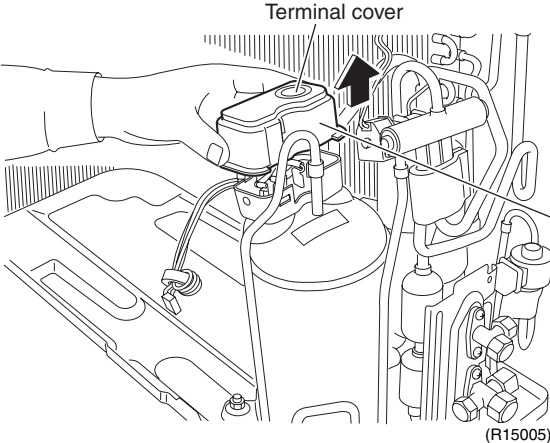
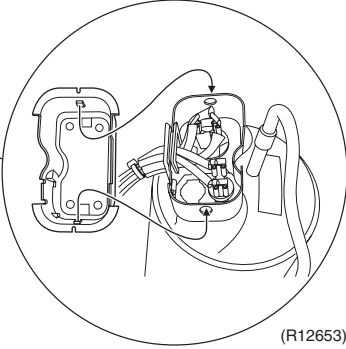
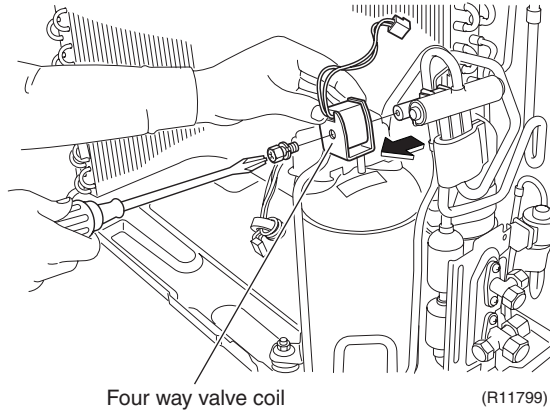
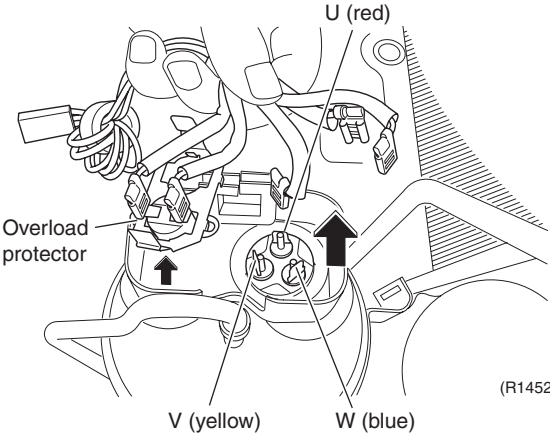
Warning Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

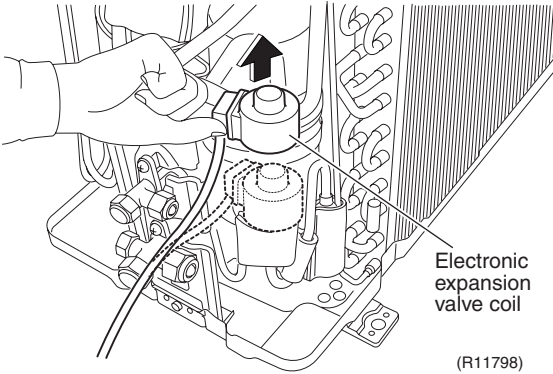
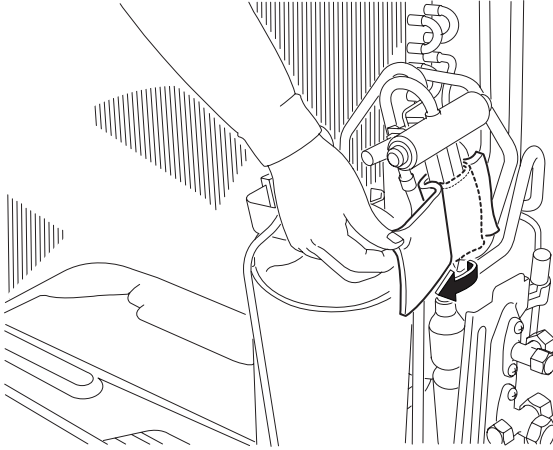
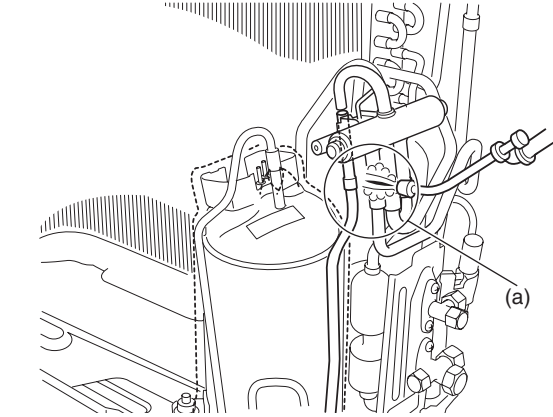
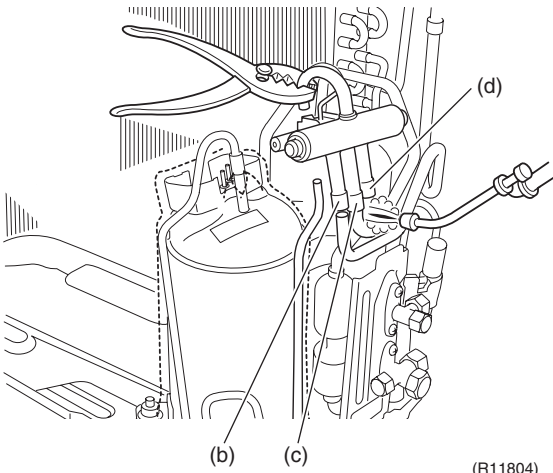
Step	Procedure	Points
1	Pull out the electronic expansion valve coil.	<p>(R14830)</p>
2	Remove the 2 screws.	<p>(R14831)</p>
<ul style="list-style-type: none"> ■ Before working, make sure that the refrigerant gas is empty in the circuit. ■ Be sure to apply nitrogen replacement when heating up the brazed part. 		<p>Warning Be careful not to get yourself burnt with the pipes and other parts that are heated by the gas brazing machine.</p> <p>Warning If the refrigerant gas leaks during work, ventilate the room. (If the refrigerant gas is exposed to flames, toxic gas may be generated.)</p> <p>Caution Never remove the electronic expansion valve because it contains plastic parts. They may melt with heat and cause operation failure. Replace the whole assembly.</p>
3	Remove the putty and heat up the brazed part.	<p>(R17339)</p>
4	Remove the electronic expansion valve ASSY.	<p>Caution Do not directly heat the electronic expansion valve. Wrap the electronic expansion valve with wet cloth and provide water so that the cloth does not dry. (Keep below 120°C.)</p> <p>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.</p>

7. Removal of Four Way Valve

Procedure

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

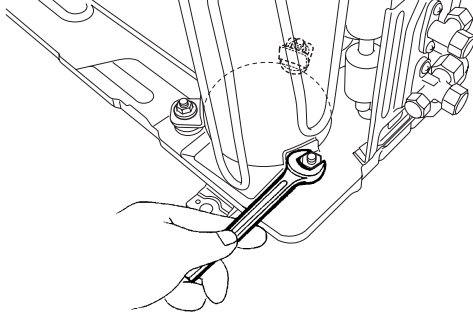

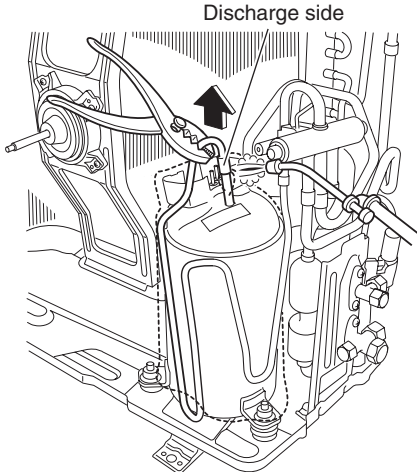
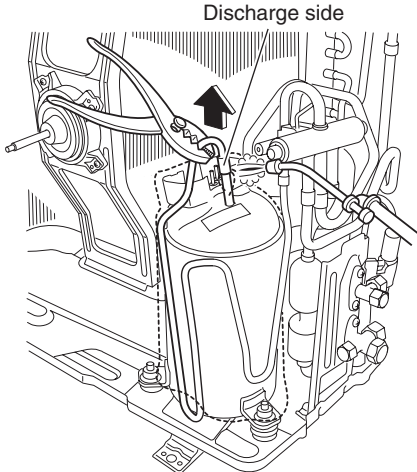
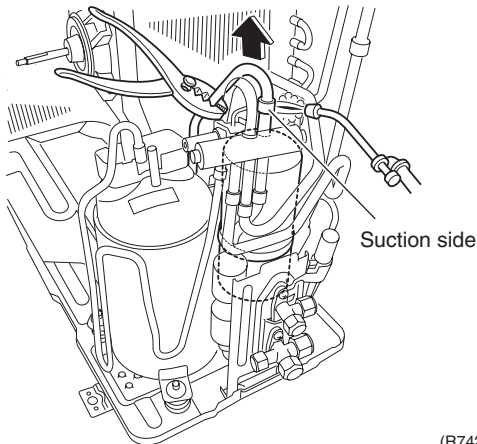
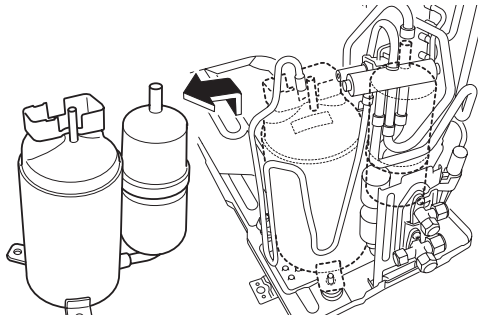
Step	Procedure	Points
1. Remove the peripheries.		
1	Remove the terminal cover.	<ul style="list-style-type: none"> There are 2 hooks at the inner side of the terminal cover.
		
2	Remove the screw and remove the four way valve coil.	
		
3	Disconnect the terminals of the compressor.	
4	Remove the overload protector.	
		

Step	Procedure	Points	
5	Pull out the electronic expansion valve coil.	 <p style="text-align: right;">(R11798)</p>	
6	Remove the putty.	 <p style="text-align: right;">(R11800)</p>	<p>Warning Be careful not to get yourself burnt with the pipes and other parts that are heated by the gas brazing machine.</p> <p>Warning If the refrigerant gas leaks during work, ventilate the room. (If the refrigerant gas is exposed to flames, toxic gas may be generated.)</p> <p>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.</p>
<ul style="list-style-type: none"> ■ 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. 			
2.	Remove the four way valve.		
1	Heat up the brazed point (a) and withdraw the piping with pliers.	 <p style="text-align: right;">(R11802)</p>	
2	Heat up the 3 brazed points of the four way valve. Disconnect the point (b) first.		
3	Disconnect the points (c) and (d).		
<p>Note:</p> <ul style="list-style-type: none"> ■ 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. 		 <p style="text-align: right;">(R11804)</p>	<p>Cautions for restoration</p> <ol style="list-style-type: none"> 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.) For the sake of this, wrap the four way valve with wet cloth and provide water so that the cloth does not dry. <p>In case of difficulty with gas brazing machine</p> <ol style="list-style-type: none"> 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.

8. Removal of Compressor

Procedure

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 peripheries.		
1 Remove the four way valve, the terminal cover and the lead wire for the compressor so as not to burn them.		<p>Warning Be careful not to get yourself burnt with the pipes and other parts that are heated by the gas brazing machine.</p>
2 Remove the 3 nuts of the compressor.		<p>Warning If the refrigerant gas leaks during work, ventilate the room. (If the refrigerant gas is exposed to flames, toxic gas may be generated.)</p>
<ul style="list-style-type: none"> ■ 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. 		<p>Warning Since it may happen that the refrigerant oil in the compressor catches fire, prepare wet cloth so as to extinguish fire immediately.</p>
2. Remove the compressor.		
1 Heat up the brazed part of the discharge side and disconnect.		<p>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.</p>
2 Heat up the brazed part of the suction side and disconnect.		
3 Lift the compressor up and remove it.		<p>Cautions for restoration</p> <ol style="list-style-type: none"> 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.) For the sake of this, wrap the four way valve with wet cloth and provide water so that the cloth does not dry.
<p>Note:</p> <ul style="list-style-type: none"> ■ 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 heat exchanger fin. 		<p>In case of difficulty with gas brazing machine</p> <ol style="list-style-type: none"> 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.

Revision History

Month / Year	Version	Revised contents
01 / 2013	Si001073	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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