






Si00-876

REMOVAL PROCEDURE



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

5.0/6.0/7.1/8.0 kW Class 18000/24000/28000 Btu/h Class

-  Outdoor Unit
-  Inverter / Hybrid
-  Pair Type



Service Manual

Removal Procedure

Outdoor Unit

●Cooling Only

RKD50BVM RKS50B2VMB
RKD60BVM RKS60B2VMB
RKD71BVM RKS71B2VMB
 RKS71B3VMB

RKD50BVMA
RKD60BVMA RKS50BVMA
RKD71BVMA RKS60BVMA
RKD60BVMA9 RKS71BVMA

RKD50BVMT RKS50BVMB
RKD60BVMT RKS60BVMB
RKD71BVMT RKS71BVMB
 RKS50BVMB9

RKD18BVMS RKS60BVMB9
RKD24BVMS RKS71BVMB9

RKD28BVMS
 RKS50BVMB

 RS50B2VMB
 RS60B2VMB
 RS50BVMB
 RS60BVMB

●Heat Pump

ARXS50CVMB RXS50B2VMB
ARXS50C2VMB RXS60B2VMB
 RXS71B2VMB
 RXS71B3VMB

RXD50BV4
RXD80CV4
 RXS50BVMA
 RXS60BVMA
 RXS71BVMA

RXD50BVMA
RXD60BVMA
RXD71BVMA
 RXS50BVMB
 RXS60BVMB
 RXS71BVMB

RXD50BVMT
RXD60BVMT
RXD71BVMT
 RYS50B2VMB
 RYS60B2VMB
 RYS50BVMB
 RYS60BVMB

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Note:

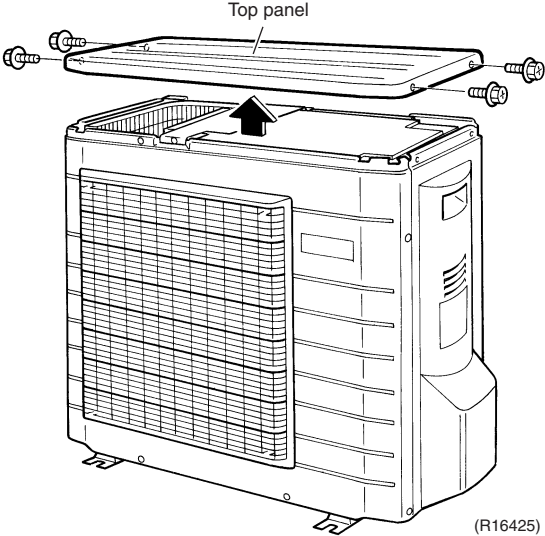
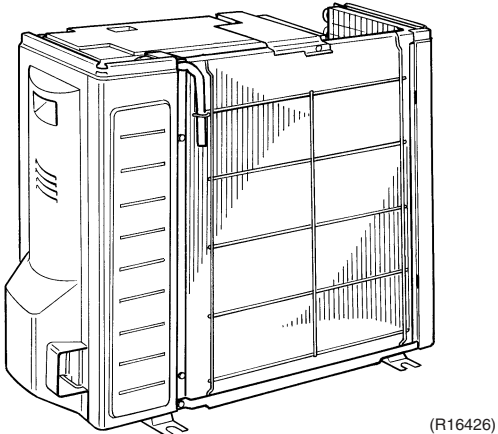
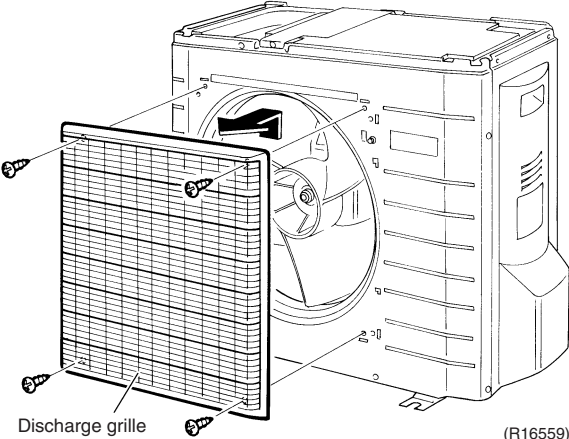
- ♦ The illustrations may be slightly different depending on the model.
- ♦ The illustrations are for heat pump models as representative.

1. Removal of Outer Panels

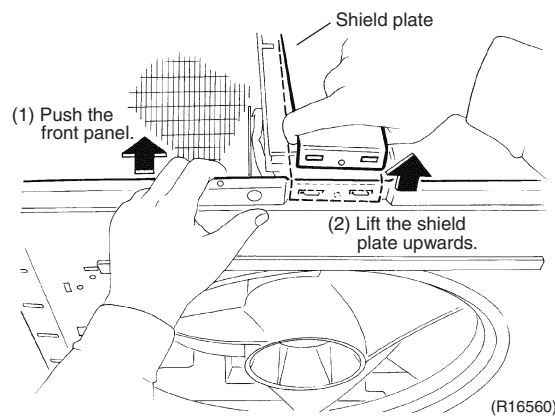
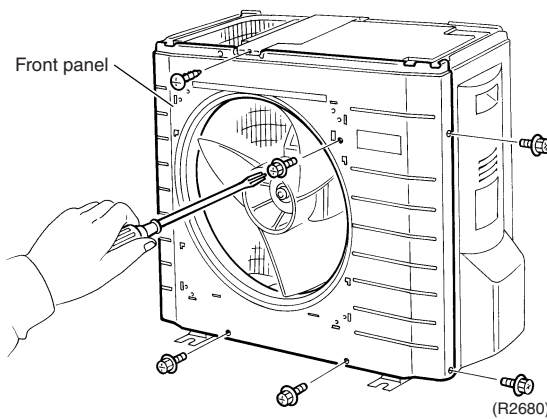
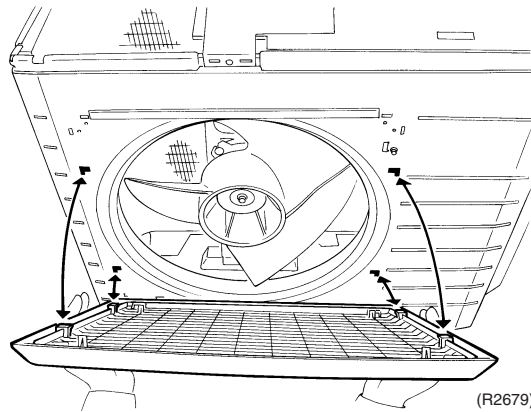
Procedure

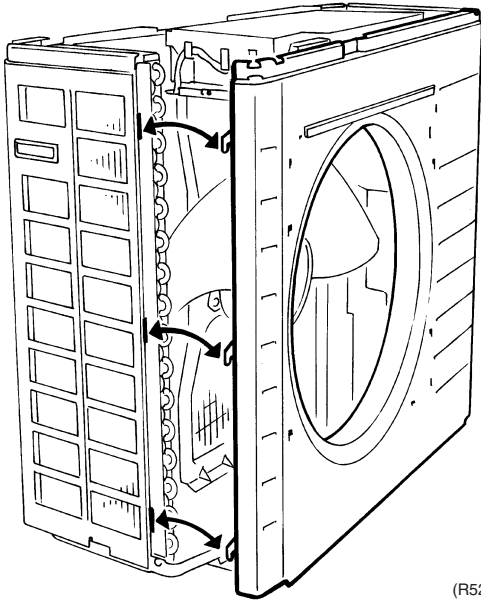
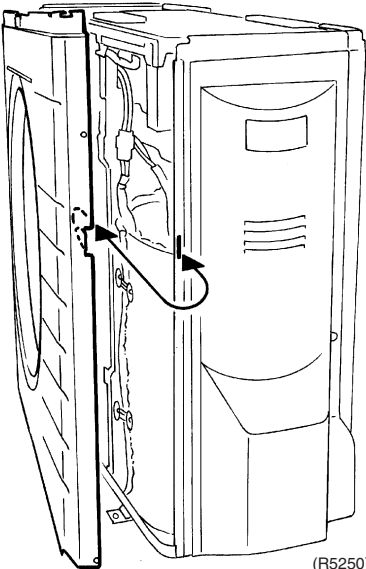
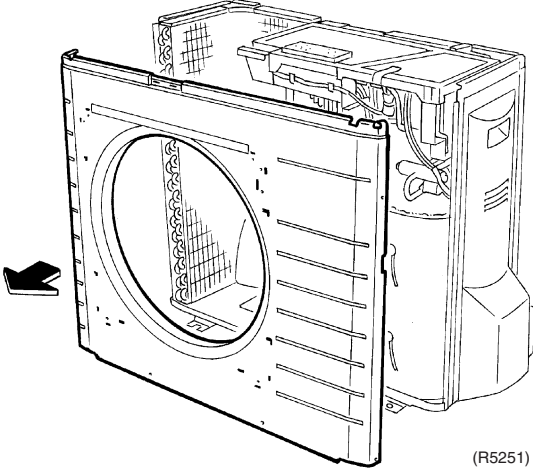


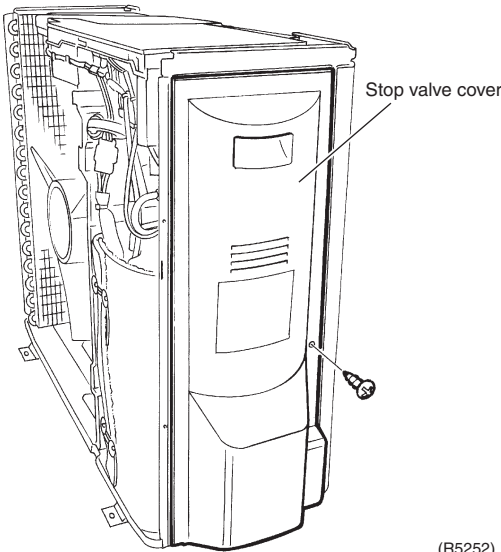
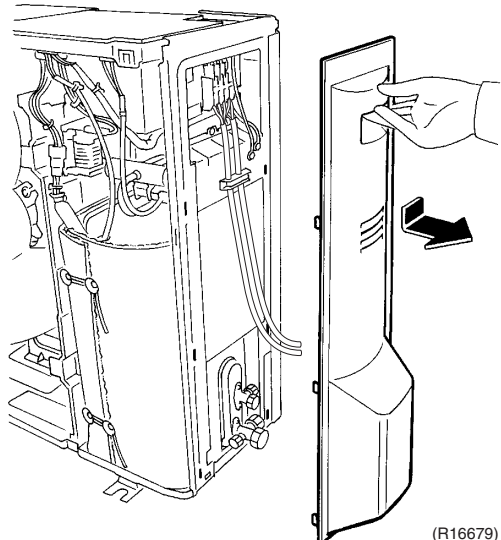
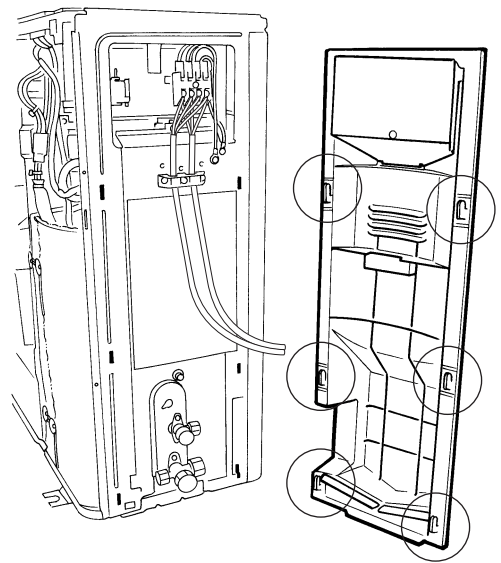
Warning Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
<p>1. Remove the panels.</p> <p>1 Remove the 4 screws and lift the top panel.</p> <p>2 Remove the 4 screws and remove the discharge grille.</p>	 <p style="text-align: center;">Top panel</p> <p style="text-align: right;">(R16425)</p>  <p style="text-align: right;">(R16426)</p>  <p style="text-align: center;">Discharge grille</p> <p style="text-align: right;">(R16559)</p>	<ul style="list-style-type: none"> ■ Take care not to cut your finger by the fins of the outdoor heat exchanger. ■ Slide the discharge grille upward and remove it.

Step	Procedure	Points
3	Remove the 6 screws of the front panel.	<ul style="list-style-type: none"> ■ The discharge grille has 4 hooks.
4	Push the front panel and lift the shield plate to unfasten the hooks.	



Step	Procedure	Points
5	<p>Unfasten the left side hooks, and then the right side hook. Remove the front panel.</p>	<ul style="list-style-type: none"> ■ Lift the front panel while pushing the left side panel inward. ■ Lift the front panel and unfasten the right side hook. ■ When reassembling the front panel, fit the right side hook first.
 <p>(R5249)</p>		
 <p>(R5250)</p>		
 <p>(R5251)</p>		

Step	Procedure	Points
2.	Remove the stop valve cover.	
1	<p data-bbox="199 280 446 347">Remove the screw of the stop valve cover.</p>  <p data-bbox="965 840 1029 873">(R5252)</p>	
2	<p data-bbox="199 884 470 1019">Pull the stop valve cover downward to unfasten the hooks and remove it.</p>  <p data-bbox="965 1433 1029 1467">(R16679)</p>	<p data-bbox="1093 1489 1444 1556">■ The stop valve cover has 6 hooks.</p>
	 <p data-bbox="925 2072 997 2105">(R16680)</p>	

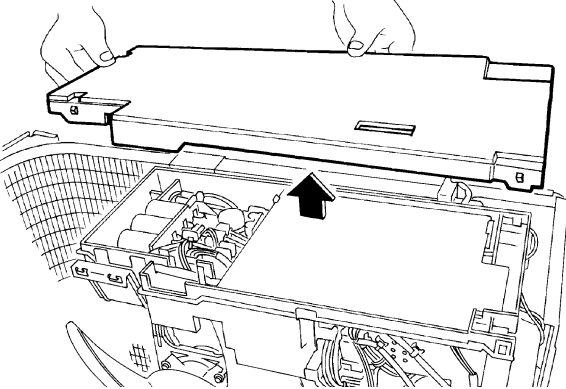
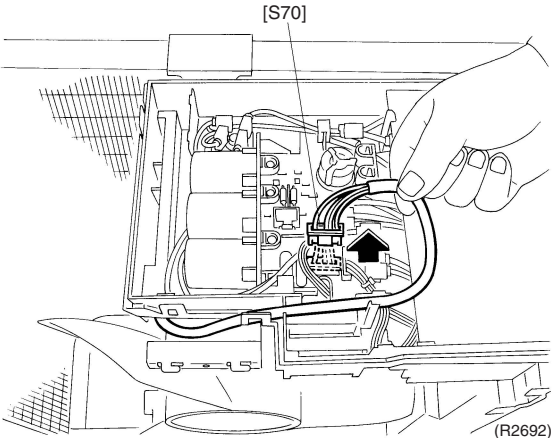
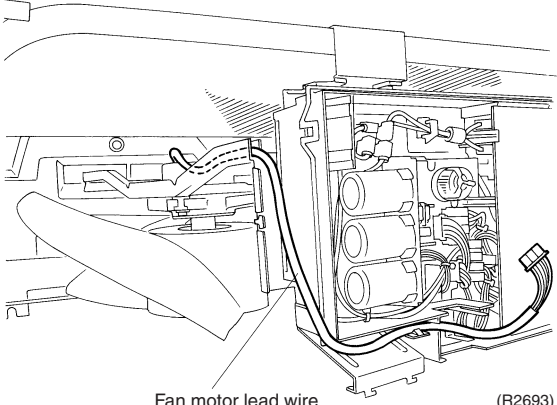
2. Removal of Outdoor Fan / Fan Motor

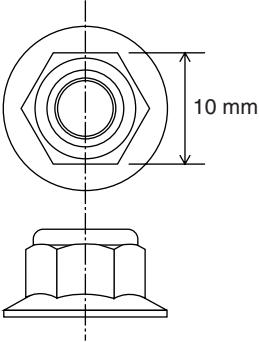
Procedure

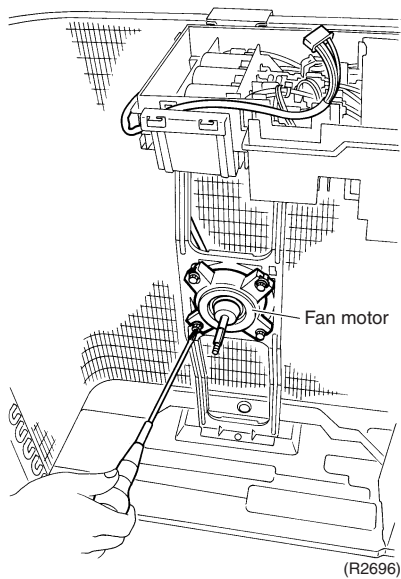
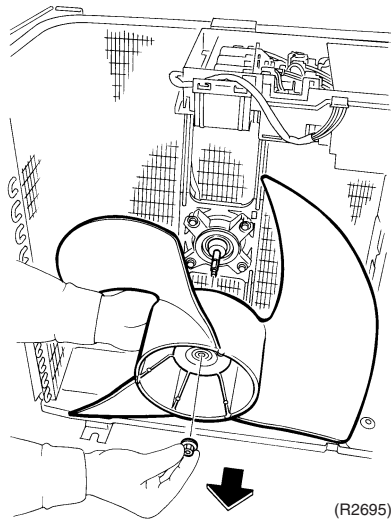
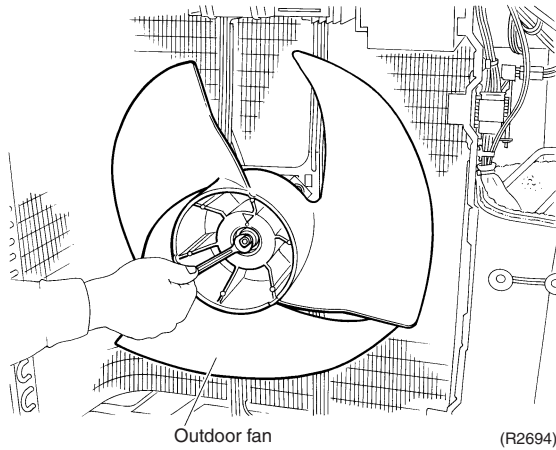


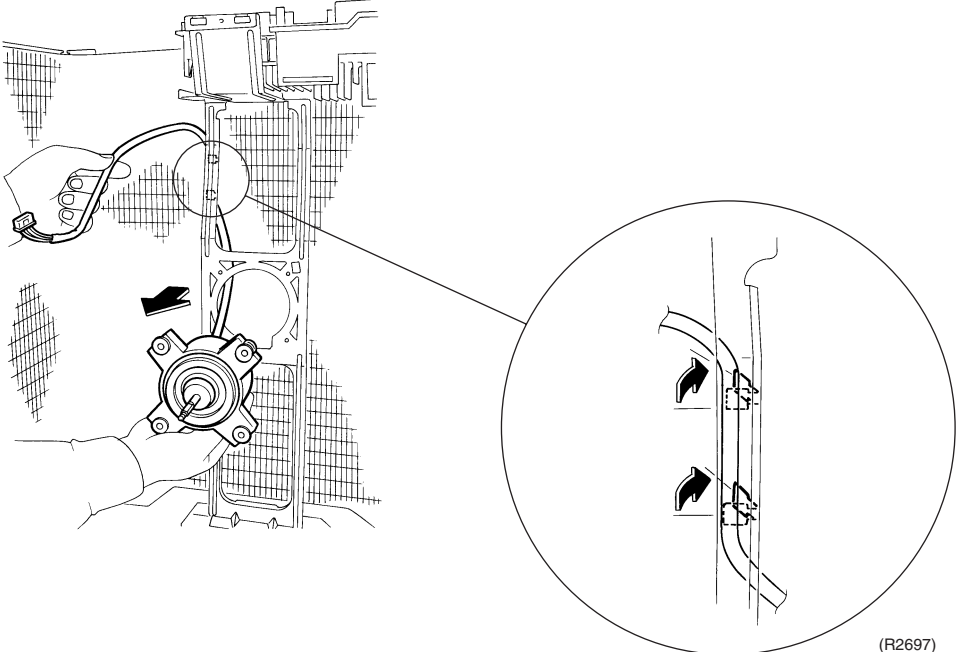
Warning Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1. Remove the electrical box cover.	<p>(R16429)</p>	<p>Preparation</p> <ul style="list-style-type: none"> ■ Remove the top panel and the front panel according to the "Removal of Outer Panels". ■ This procedure is not necessary to remove the outdoor fan only.
1 Remove the screw of the shield plate.	<p>(R17063)</p>	
2 Unfasten the 2 hooks and remove the shield plate.	<p>(R2690)</p>	
3 Release the 4 hooks of the electrical box cover and remove it.		

Step	Procedure	Points
	 <p style="text-align: right;">(R16431)</p>	
<p>2. Remove the fan motor.</p> <p>1</p> <p>2</p>	<p>Disconnect the connector for the fan motor [S70].</p>  <p style="text-align: right;">(R2692)</p> <p>The illustration shows arrangement of the fan motor lead wire.</p>  <p style="text-align: right;">(R2693)</p>	

Step	Procedure	Points
3	Remove the nut of the outdoor fan.	<p>■ Nut size: M6</p>  <p>(R12236)</p> <p>■ When reassembling, align the ▼ mark of the outdoor fan with the D-cut section of the motor shaft.</p>
4	Remove the 2 lower screws from the fan motor first.	<p>■ Be sure to remove the lower screws first. If the top screws are removed first, the fan motor may tilt down or fall and cause injury because its center of gravity is shifted to the front.</p>
5	Then, remove the 2 upper screws.	



Step	Procedure	Points
6	<p data-bbox="204 219 459 342">Release the fan motor lead wire from the 2 hooks and pull the fan motor out.</p> 	<ul data-bbox="1098 219 1457 376" 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. <p data-bbox="1385 1077 1449 1099">(R2697)</p>

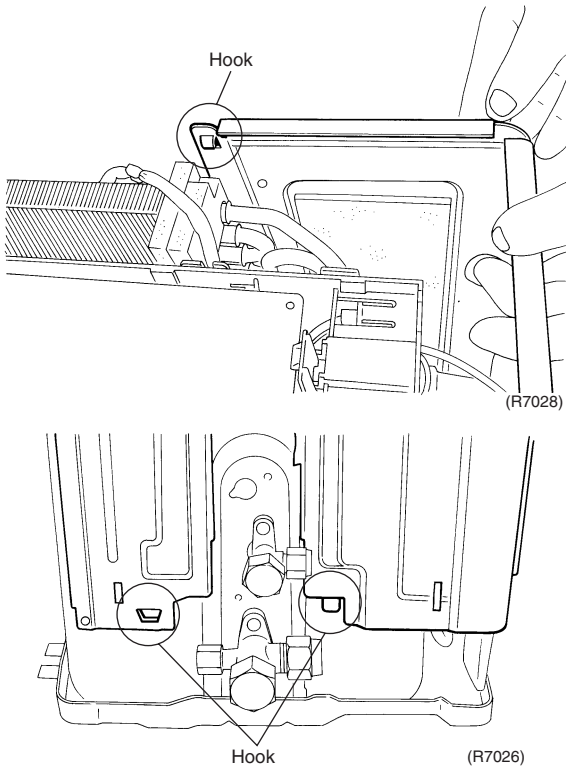
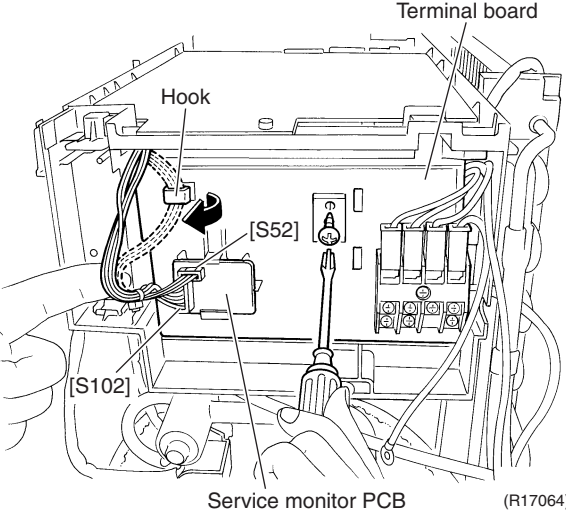
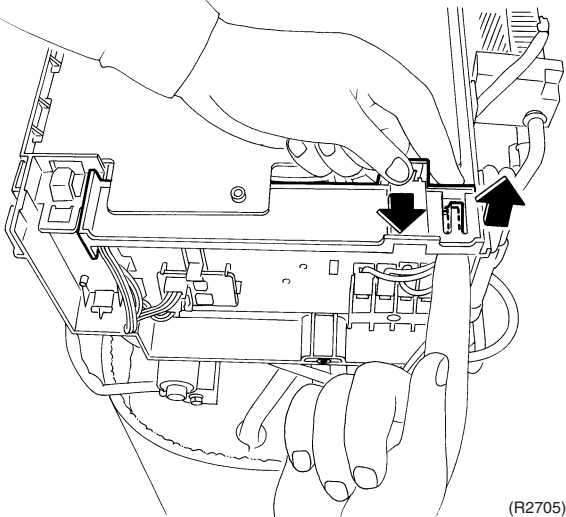
3. Removal of PCBs / Electrical Box

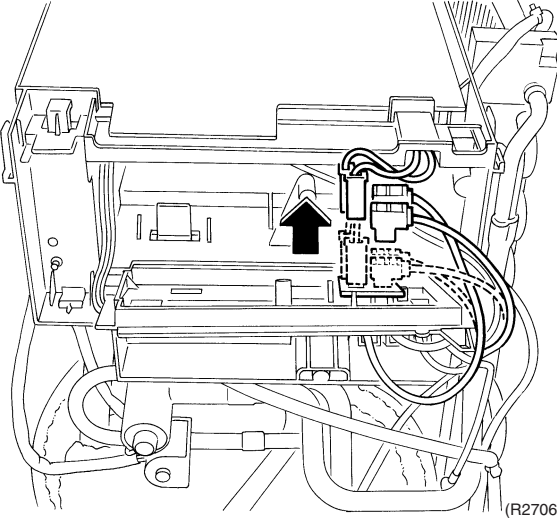
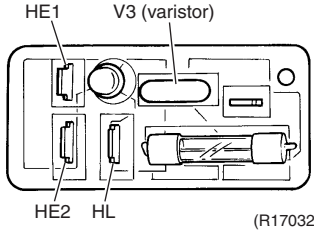
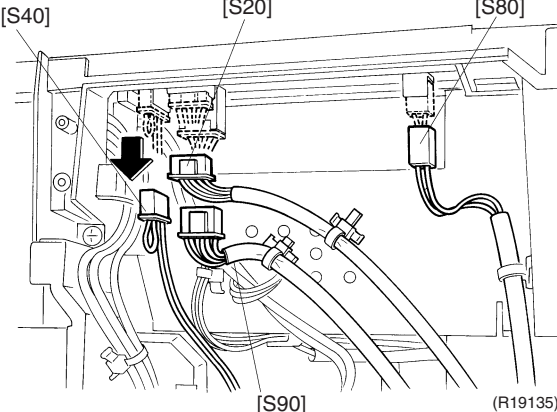
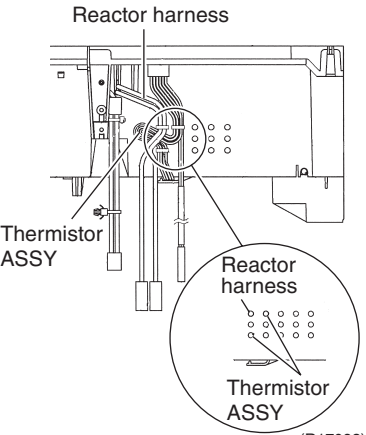
Procedure

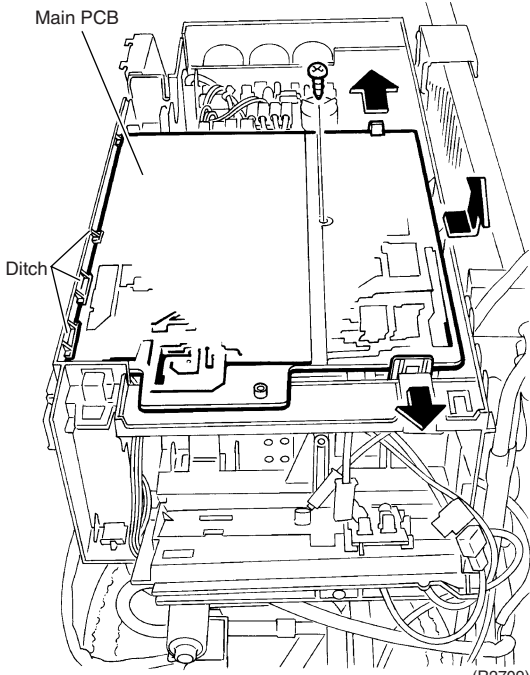
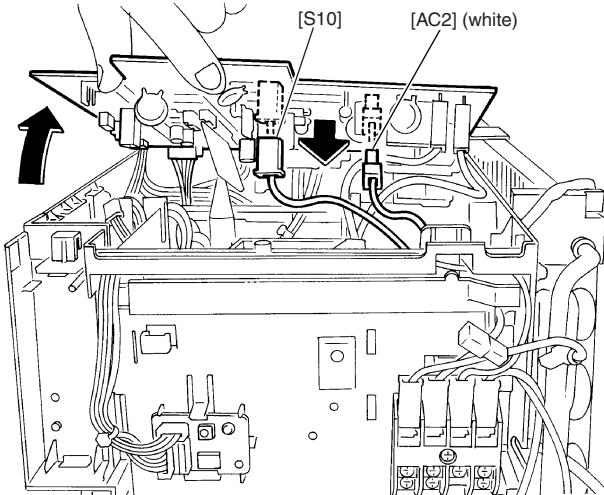
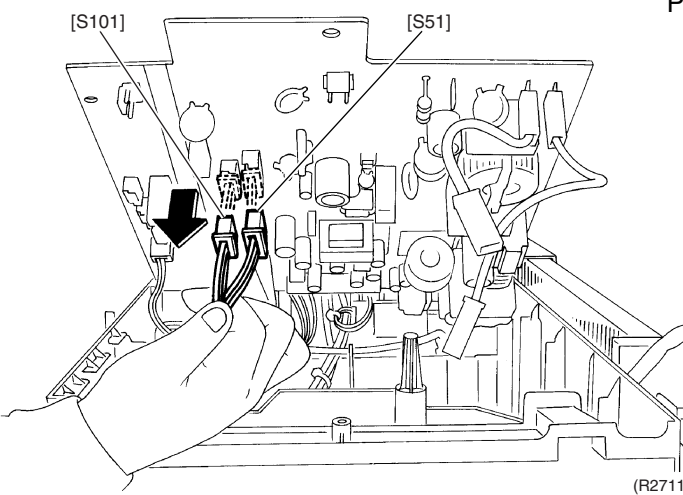


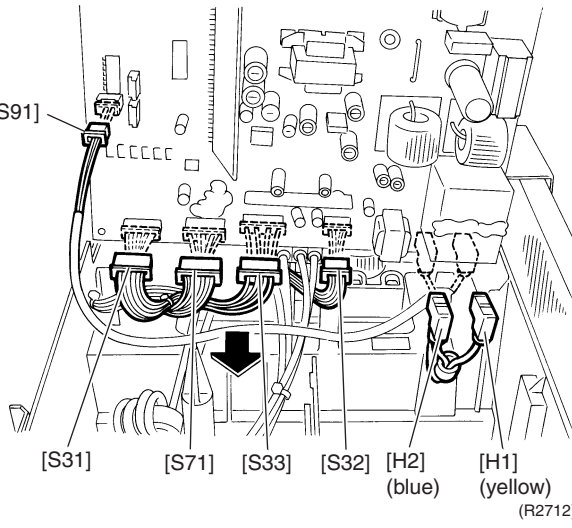
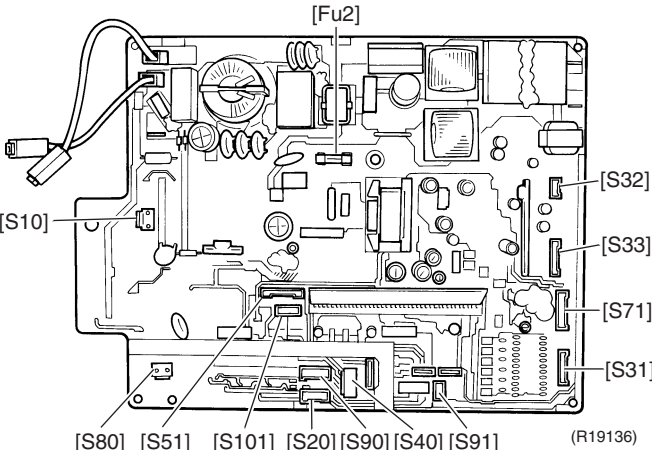
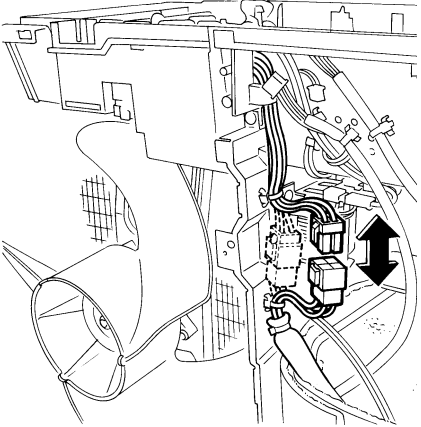
Warning Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

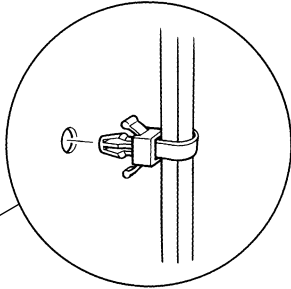
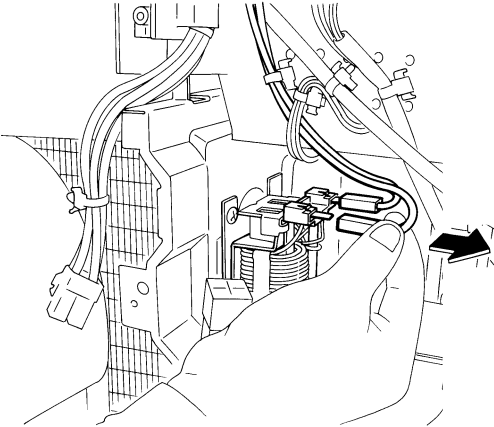
Step	Procedure	Points
1. Remove the right side panel.		<p>Preparation</p> <ul style="list-style-type: none"> ■ Remove the top panel and the front panel according to the "Removal of Outer Panels". ■ Colors of the connection wires are as follows. <ul style="list-style-type: none"> (1) black (2) white (3) red (⊕) yellow / green
1 Remove the 4 screws and disconnect the connection wire and the power supply wire.		
2 Remove the 2 screws and detach the earth wires.		
3 Remove the 3 screws of the right side panel.		
4 Remove the screw of the electrical box.		

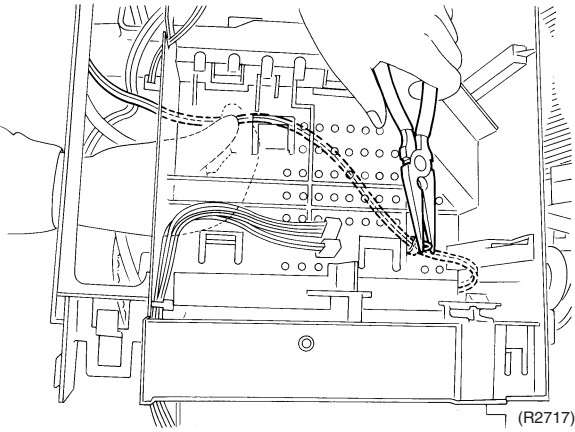
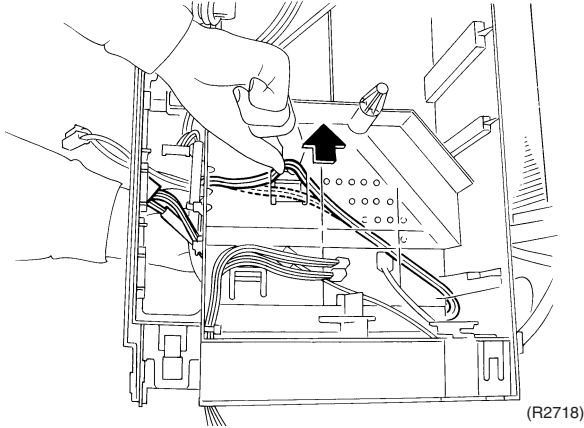
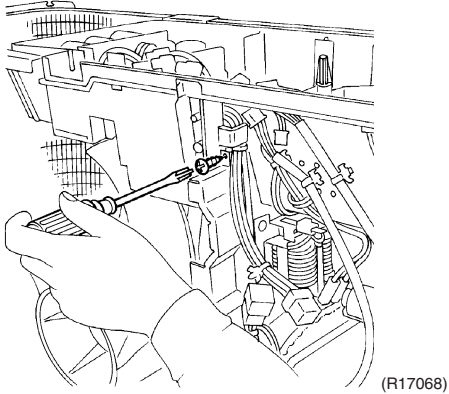
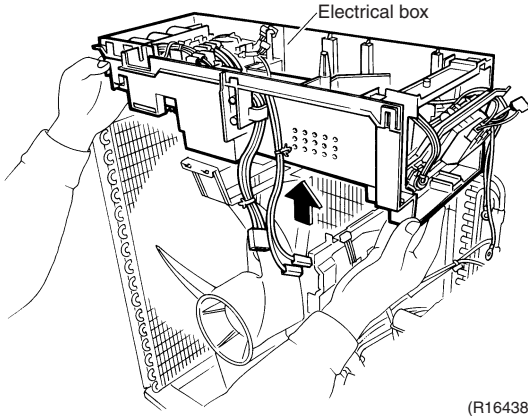
Step	Procedure	Points
5	Unfasten the hooks and remove the right side panel.	<ul style="list-style-type: none"> ■ When reassembling, insert the upper hook and the 2 lower hooks back into place.
		
2. Remove the service monitor PCB.		
1	Release the harness from the hook.	
2	Disconnect the connectors [S52] [S102] from the service monitor PCB.	
3	Remove the service monitor PCB.	
4	Remove the screw of the terminal board.	
3. Remove the main PCB.		
1	Unfasten the hook to release the terminal board. Open the terminal board.	

Step	Procedure	Points
2	<p>Disconnect the harnesses from the power supply PCB.</p>  <p>(R2706)</p>	<p>power supply PCB</p>  <p>(R17032)</p> <p>[HL] (black): terminal board [HE2] (yellow/green): earth [HAC1] (black): main PCB (AC1) [HE1] (yellow/green): main PCB (E)</p>
3	<p>Disconnect the connectors of the front side.</p>  <p>(R19135)</p>	<p>[S20]: electronic expansion valve [S40]: overload protector [S80]: four way valve coil [S90]: thermistors</p> <ul style="list-style-type: none"> ■ The cooling only models do not have the harness for [S80]. ■ When reassembling, insert each clamp into the holes. ■ When reassembling, the thermistor harness should be placed between the electrical box and the reactor harness as below.  <p>Reactor harness</p> <p>Thermistor ASSY</p> <p>Thermistor ASSY</p> <p>(R17093)</p>

Step	Procedure	Points
<p>4 Remove the screw of the main PCB.</p> <p>5 Unfasten the 2 hooks and release the main PCB from the ditch of the front side.</p>	 <p>Main PCB</p> <p>Ditch</p> <p>(R2709)</p>	
<p>6 Disconnect the harnesses [S10] [AC2] while lifting the main PCB.</p>	 <p>[S10]</p> <p>[AC2] (white)</p> <p>(R2710)</p>	<p>[S10] [AC2]: terminal board</p>
<p>7 Disconnect the connectors [S51] [S101].</p>	 <p>[S101]</p> <p>[S51]</p> <p>(R2711)</p>	<p>[S51] [S101]: service monitor PCB</p>

Step		Procedure	Points
8	Disconnect the connectors and remove the main PCB.	 	<p>[S10]: terminal board [S20]: electronic expansion valve [S31]: CN14 on SPM [S32]: CN11 on SPM [S33]: [S34] on MID [S40]: overload protector [S51]: [S52] on service monitor PCB [S71]: [S72] on MID [S80]: four way valve [S90]: thermistors [S91]: radiation fin thermistor [S101]: [S102] on service monitor PCB [H1] [H2]: diode bridge</p>
9	Disconnect the relay connector for the compressor.		

Step	Procedure	Points
10	Release the clamp with pliers.	
11	Disconnect the 2 connectors for the reactor.	(R17066)
		(R17067)

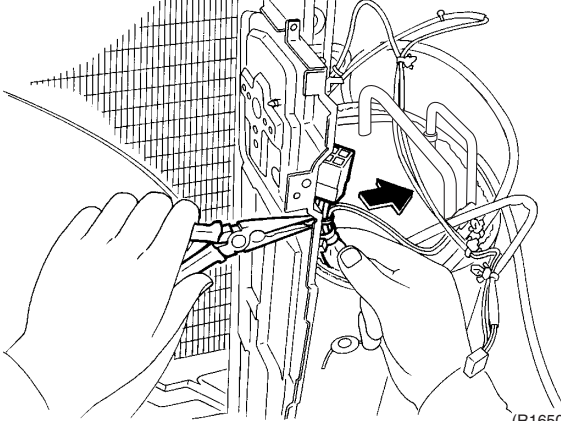
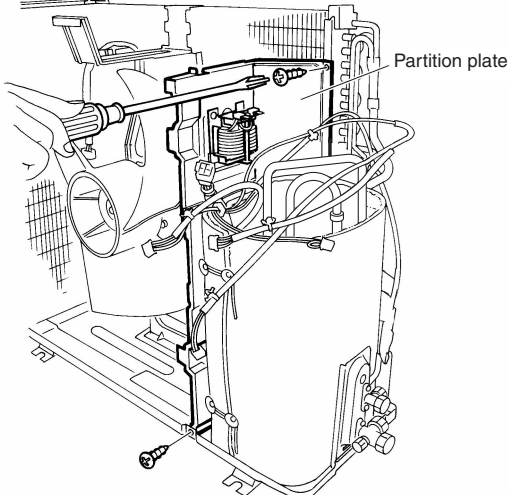
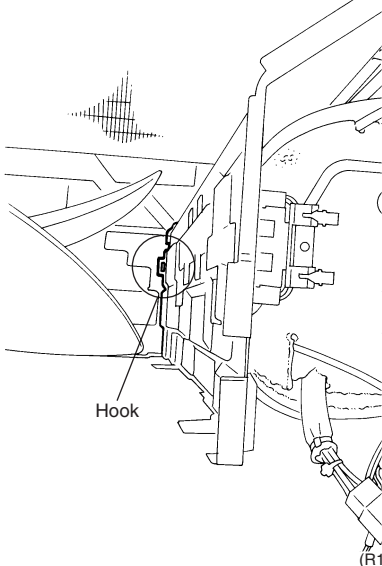
Step	Procedure	Points
12	Pull the clamp and draw the thermistor harness out from the back of the electrical box.	
	 <p>(R2717)</p>	
	 <p>(R2718)</p>	
13	Remove the screw of the electrical box.	
	 <p>(R17068)</p>	
14	Lift up and remove the electrical box.	
	 <p>(R16438)</p>	

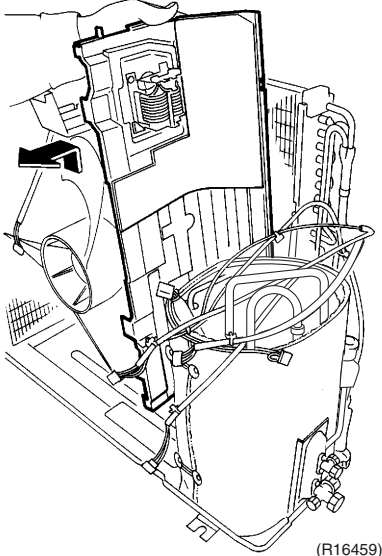
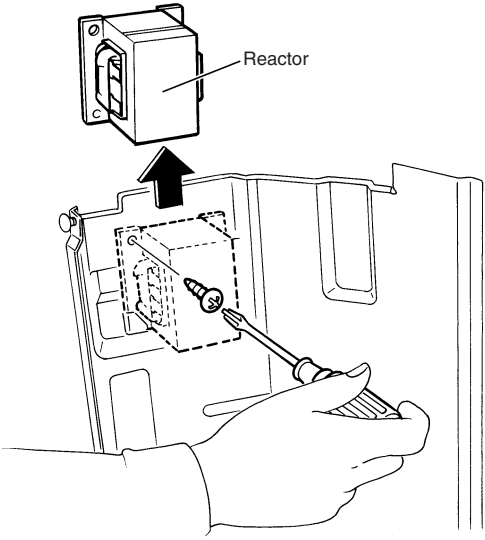
4. Removal of Reactor

Procedure



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 clamp with pliers.  <p style="text-align: right;">(R16508)</p>	
2	Remove the 2 screws of the partition plate.  <p style="text-align: right;">(R16509)</p>  <p style="text-align: right;">(R16439)</p>	<ul style="list-style-type: none"> ■ The partition plate is fixed to the bottom frame with a hook.

Step	Procedure	Points
3	<p>Lift up the partition plate and remove it.</p>  <p>(R16459)</p>	
4	<p>Remove the screw. Slide the reactor upward and remove it from the partition plate.</p>  <p>(R2726)</p>	

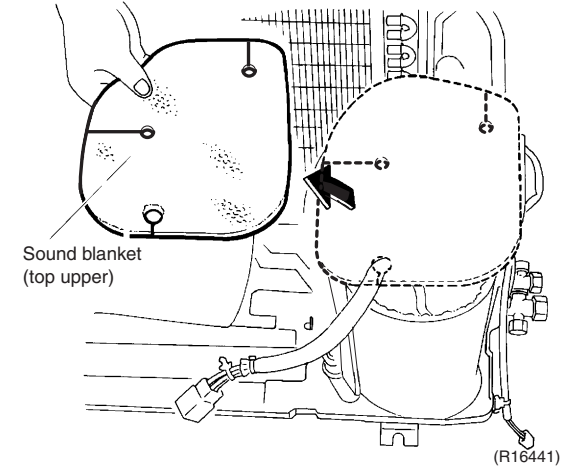
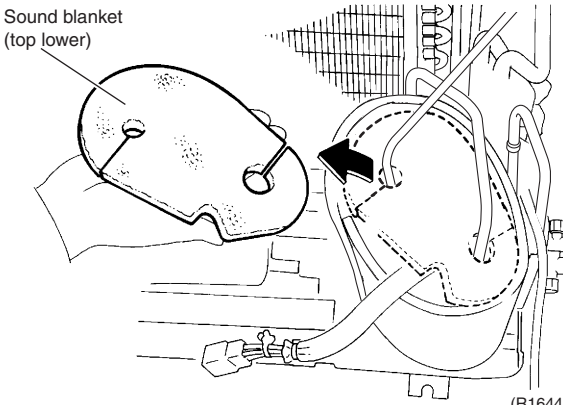
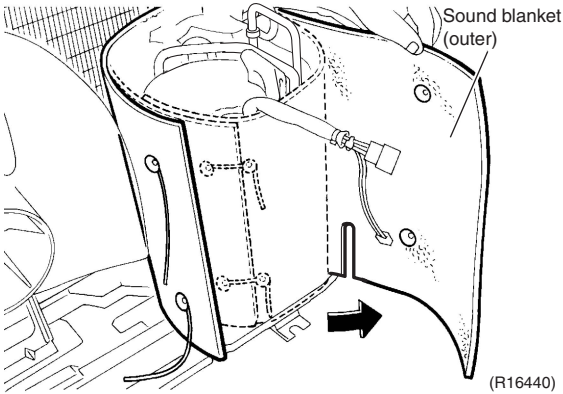
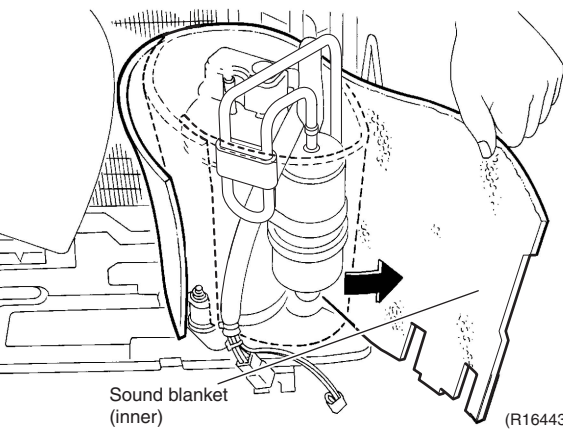
5. Removal of Sound Blankets

Procedure



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

Step	Procedure	Points
<p>1. Remove the thermistor ASSY.</p>	<p>(R16557)</p>	<ul style="list-style-type: none"> ■ Remove the outer panels according to the "Removal of Outer Panels / Fan Motor". ■ Remove the electrical box according to the "Removal of Electrical Box".
<p>1 Release the discharge pipe thermistor.</p>	<p>Discharge pipe thermistor (R16460)</p>	<ul style="list-style-type: none"> ■ Be careful not to lose the clip for the thermistor.
<p>2 Cut the clamp and pull out the outdoor heat exchanger thermistor.</p>	<p>Clamp (R16461)</p> <p>Outdoor heat exchanger thermistor (R16461)</p>	<p>Clip (R12287)</p>
<p>3 Remove the thermistor ASSY.</p>		

Step	Procedure	Points
2. Remove the sound blankets.		
1	<p>Remove the sound blanket (top upper).</p>  <p>(R16441)</p>	<ul style="list-style-type: none"> Since the piping ports are torn easily, remove the sound blanket carefully.
2	<p>Remove the sound blanket (top lower).</p>  <p>(R16442)</p>	<ul style="list-style-type: none"> Some models do not have the sound blanket (top lower).
3	<p>Remove the sound blanket (outer).</p>  <p>(R16440)</p>	
4	<p>Remove the sound blanket (inner).</p>  <p>(R16443)</p>	

6. Removal of the Four Way Valve

Procedure



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

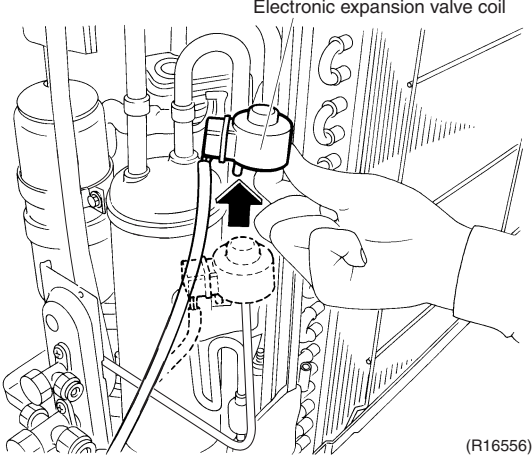
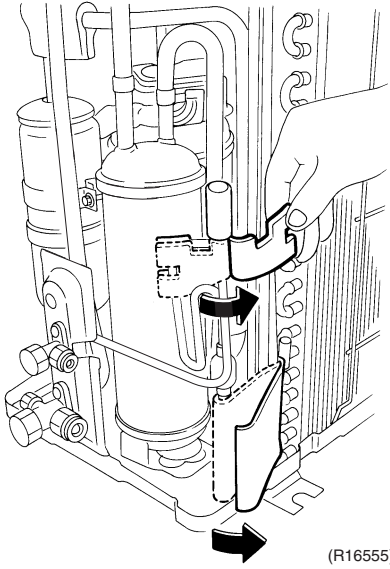
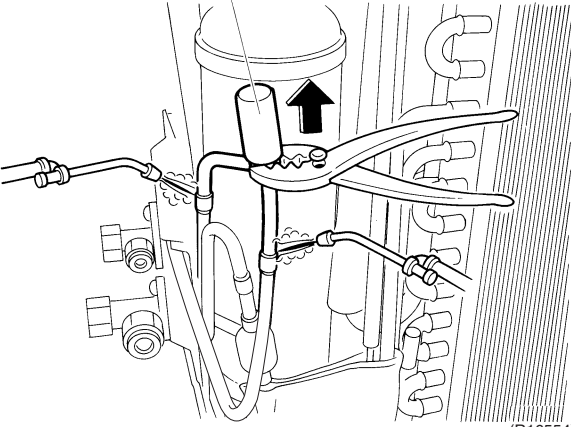
Step	Procedure	Procedure	Points
1	Loosen the screw of the four way valve coil.	<p>Four way valve</p> <p>Four way valve coil</p> <p>(R2734)</p>	<ul style="list-style-type: none"> ■ Provide a protective sheet or a steel plate so that the brazing flame cannot influence peripheries. ■ Be careful so as not to break the pipes by pressing it excessively by pliers when withdrawing it.
2	Heat up the brazed part of the four way valve and disconnect. <ul style="list-style-type: none"> ■ Be sure to apply nitrogen replacement when heating up the brazed part. 	<p>(R2735)</p>	<p>Caution Be careful about the four way valve, pipes and so on, which were heated up by a gas brazing machine, so as not to get burnt your hands.</p> <p>Cautions for restoration</p> <ol style="list-style-type: none"> 1. Restore the piping by non-oxidation brazing. Braze it quickly when no nitrogen gas can be used. 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. For the sake of this, wrap the four way valve with wet cloth and provide water so that the cloth will not be dried and avoid excessive heating. (Keep below 120°C)
3	Heat up every brazed part in turn and disconnect.	<p>(R2736)</p>	<p>In case of the 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 by a miniature copper tube cutter in order to make it easy to disconnect. <p>Note: Do not use a metal saw for cutting pipes by all means because the sawdust come into the circuit.</p>

7. Removal of Electronic Expansion Valve

Procedure



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

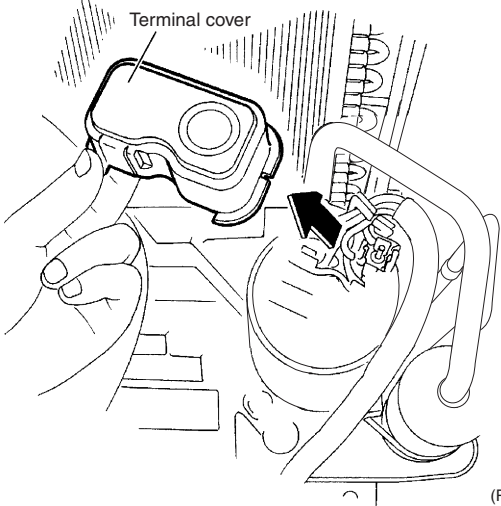
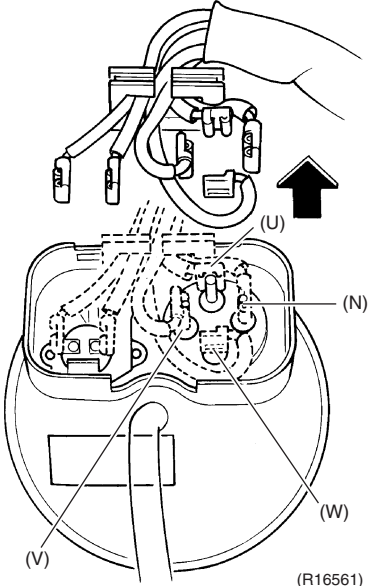
Step	Procedure	Points
1	<p>Remove the electronic expansion valve coil.</p>  <p>(R16556)</p>	
2	<p>Remove the sheets of putty.</p>  <p>(R16555)</p>	
3	<p>Heat up the 2 brazed parts of the electronic expansion valve and remove it.</p>  <p>(R16554)</p>	<p>Warning Be careful not to get yourself burnt with 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>

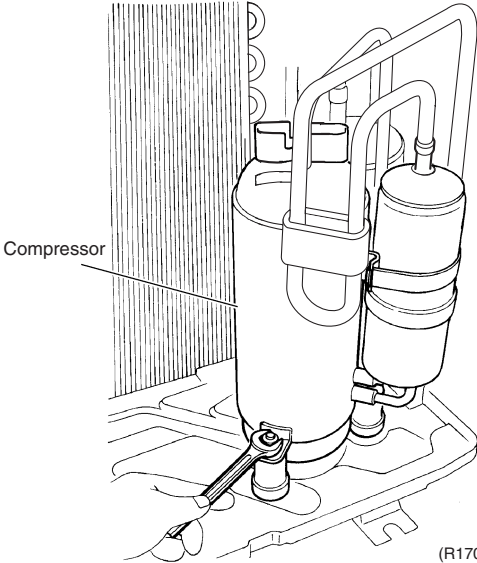
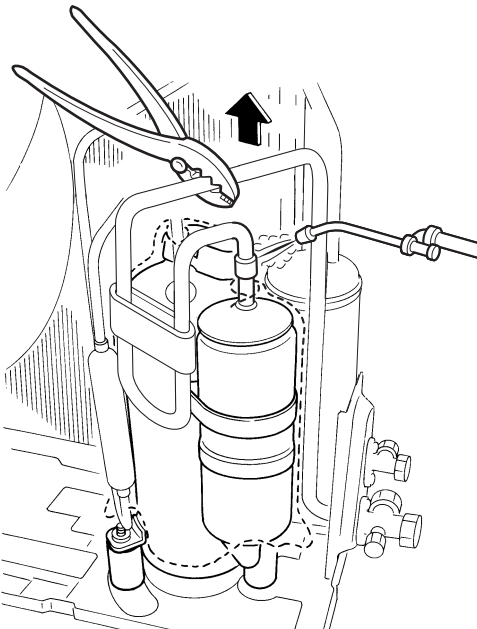
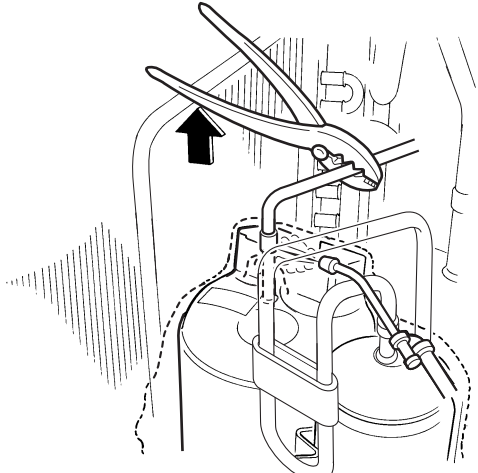
8. Removal of Compressor

Procedure



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

Step	Procedure	Points
1	<p>Remove the terminal cover.</p>  <p style="text-align: right;">(R16444)</p>	
2	<p>Disconnect the lead wires of the compressor.</p>  <p style="text-align: right;">(R16561)</p>	<p>U : red V : yellow W : blue N : brown</p>

Step	Procedure	Points
3	Remove the nut of the compressor.	<p>Cautions for restoration</p> <ol style="list-style-type: none"> 1. Restore the piping by non-oxidation brazing. 2. Avoid excessive heating. (Keep below 120°C) <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. <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>Warning Since it may happen that the refrigerant oil in the compressor catches fire, prepare wet cloth so as to extinguish fire immediately.</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. 		 <p>(R17034)</p>
4	Heat up the brazed part of the discharge side and disconnect it.	 <p>(R16551)</p>
5	Heat up the brazed part of the suction side and disconnect it.	 <p>(R16552)</p>
6	Lift the compressor up and remove it.	
<ul style="list-style-type: none"> ■ 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. 		

Revision History

Month / Year	Version	Revised contents
06 / 2013	Si00-876	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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