






Si261304E

REMOVAL PROCEDURE



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

8/10 HP Class

-  Outdoor Unit
-  Inverter
-  Multi Type



Service Manual Removal Procedure

Outdoor Unit

Applicable Models

- Heat Pump
RZQ200C7Y1B
RZQ250C7Y1B

Table of Contents

1. Procedure to Remove Related to Outside Panel	2
2. Procedure to Remove Fan Motor	3
3. Procedure to Remove Electrical Component Box	4
4. Procedure to Remove PCB	5
5. Procedure to Remove Electronic Expansion Valve and Solenoid Valve	7
6. Procedure to Remove Pressure Switch, Pressure Sensor, Four Way Valve	9
7. Procedure to Remove Compressor	11
8. Procedure to Remove Thermistor	12

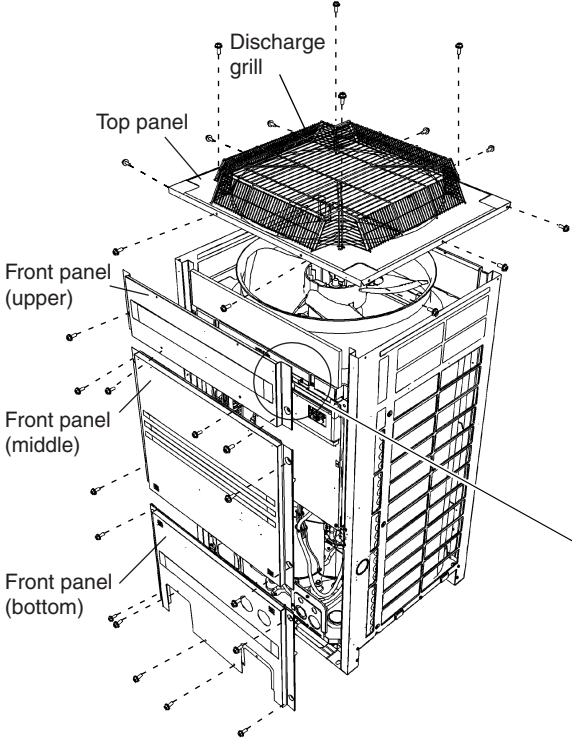
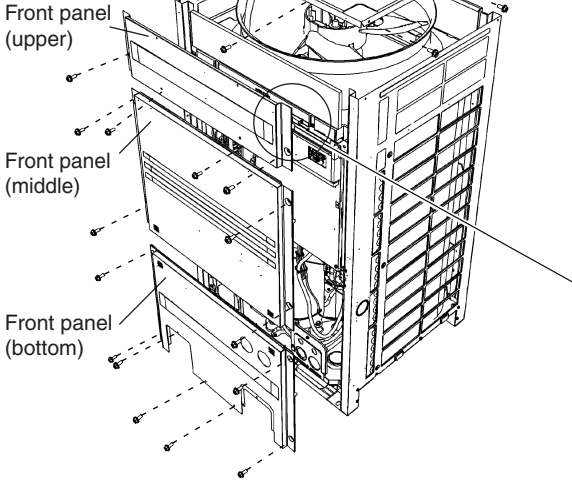

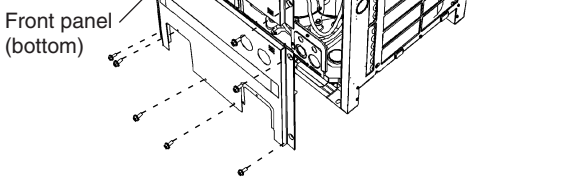
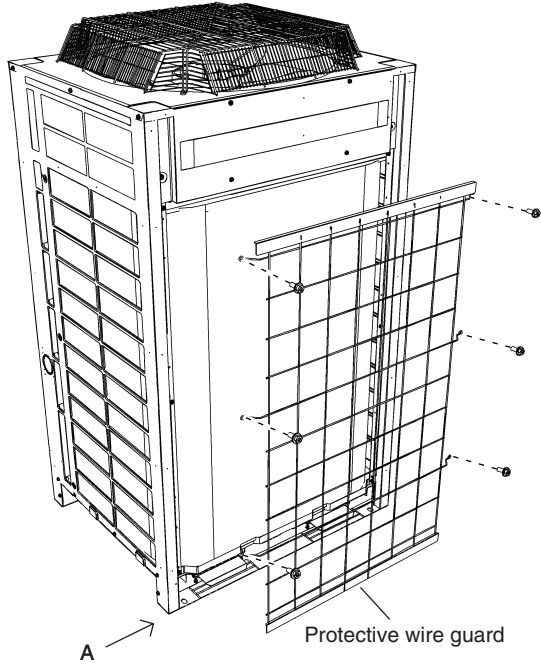
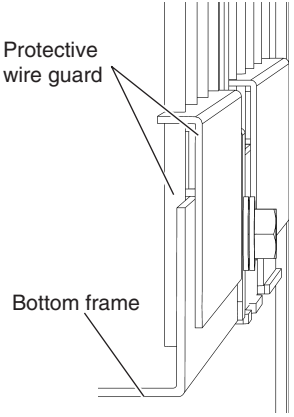
1. Procedure to Remove Related to Outside Panel

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 top panel, etc.</p> <p>1 Unscrew the 4 screws and pull up the discharge grill.</p> <p>2 Unscrew the 10 screws and pull up the top panel.</p>		<ul style="list-style-type: none"> ■ It is possible to remove the top panel assembly as a whole without dismounting the discharge grill from the top panel. ■ When using a stepladder, place it in a secure manner for safe operation.
<p>2. Remove the front panel (upper)</p> <p>1 Unscrew the 4 fixing screws and pull out the front panel (upper).</p>		<ul style="list-style-type: none"> ■ There is a hook on the both sides of the front panel (upper). 
<p>3. Remove the front panel</p> <p>1 Unscrew the 4 screws and pull out the front panel (middle).</p> <p>2 Unscrew the 7 screws and pull out the front panel (bottom).</p>		<ul style="list-style-type: none"> ■ View from arrow A
<p>4. Remove the protective wire guard</p> <p>1 Unscrew the 6 screws, tilt the upper part of the protective wire guard toward you and pull up the protective wire guard.</p>		

2. Procedure to Remove 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
<p>■ Remove the top panel assy and front panel (middle) according to "Procedure to Remove Related to Outside Panel".</p>		<p>■ Precaution for mounting the fan: The hub has a D-shaped hole. Use the D-shaped cover as a guide when mounting the fan.</p>
<p>1. Remove the propeller fan</p>		<p>■ Precaution for mounting the fan: The hub has a D-shaped hole. Use the D-shaped cover as a guide when mounting the fan.</p>
<p>1 Loosen the 4 mounting screws (M10) using a hexagonal wrench (5mm).</p> <p>2 Pull up the propeller fan.</p>		<p>■ Precaution for mounting the fan: The hub has a D-shaped hole. Use the D-shaped cover as a guide when mounting the fan.</p>
<p>2. Remove the fan motor</p>		
<p>1 Unscrew the 4 screws, and then slide below the electrical component box cover to remove it.</p>		
<p>2 Remove the relay connector (X1A, X2A) for the fan motor (M1F).</p>		<p>■ Relay connector joint</p>
<p>3 Remove the clamps that fix the lead wire.</p>		<p>■ Relay connector joint</p>
<p>4 Unscrew the 4 bolts that fix the fan motor to remove the fan motor.</p>		<p>■ Relay connector joint</p>

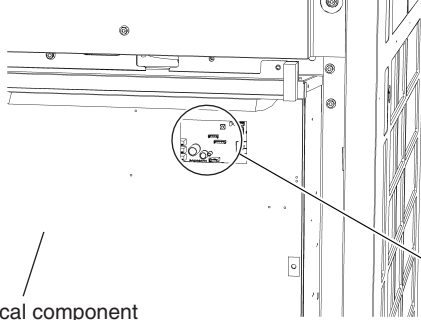
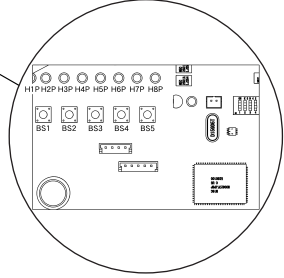
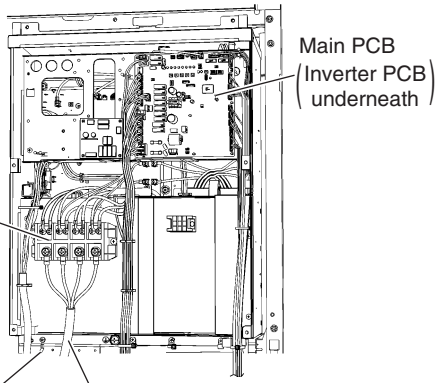
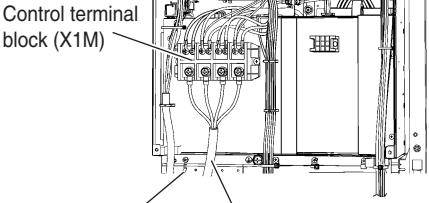
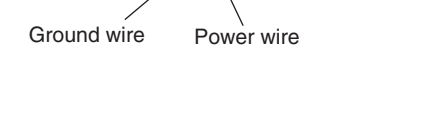
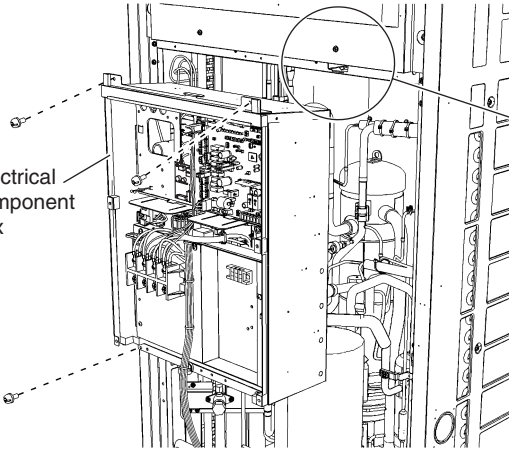
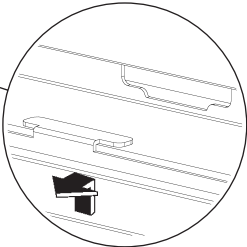
3. Procedure to Remove Electrical Component Box

Procedure



Warning

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

Step	Procedure	Points
<ul style="list-style-type: none"> ■ Remove the front panel (middle, bottom) according to "Procedure to Remove Related to Outside Panel". ■ Remove the electrical component box cover according to "Procedure to Remove Fan Motor". 	 <p>Electrical component box cover</p>	<ul style="list-style-type: none"> ■ The operation buttons and LED lamps can be viewed through the inspection hole. 
<p>1. Remove the electrical component assembly</p>		
<p>1 Disconnect the connector from the main PCB (A1P).</p>		
<p>2 Disconnect the relay connector (X1A, X2A) for the fan motor (M1F).</p>	 <p>Main PCB (Inverter PCB) underneath</p>	
<p>3 Remove the power wire from the terminal block (X1M). (3 screws)</p>	 <p>Control terminal block (X1M)</p>	
<p>4 Disconnect 3 lead wires from the terminal block for the inverter compressor (M1C). (fasten terminal: 3 places)</p>	 <p>Ground wire Power wire</p>	
<p>5 Remove the indoor/outdoor wiring from the control terminal block (X2M) on the main PCB. (3 screws)</p>		
<p>6 Remove the earth screw.</p>		<ul style="list-style-type: none"> ■ Fix the top of the electrical component box.
<p>7 Unscrew the 3 screws and lift the top of the electrical component assembly to remove it.</p>	 <p>Electrical component box</p>	

4. Procedure to Remove PCB

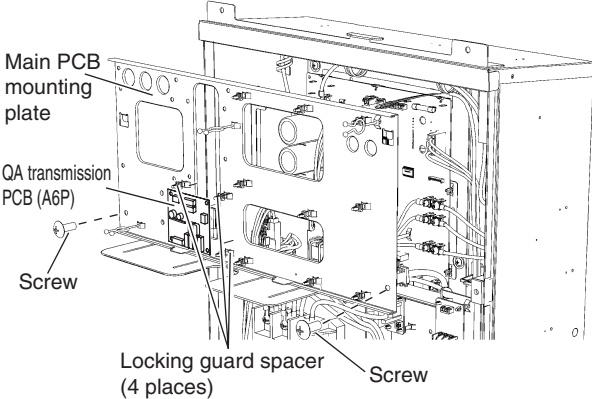
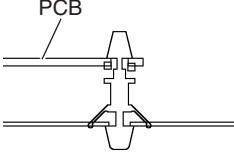
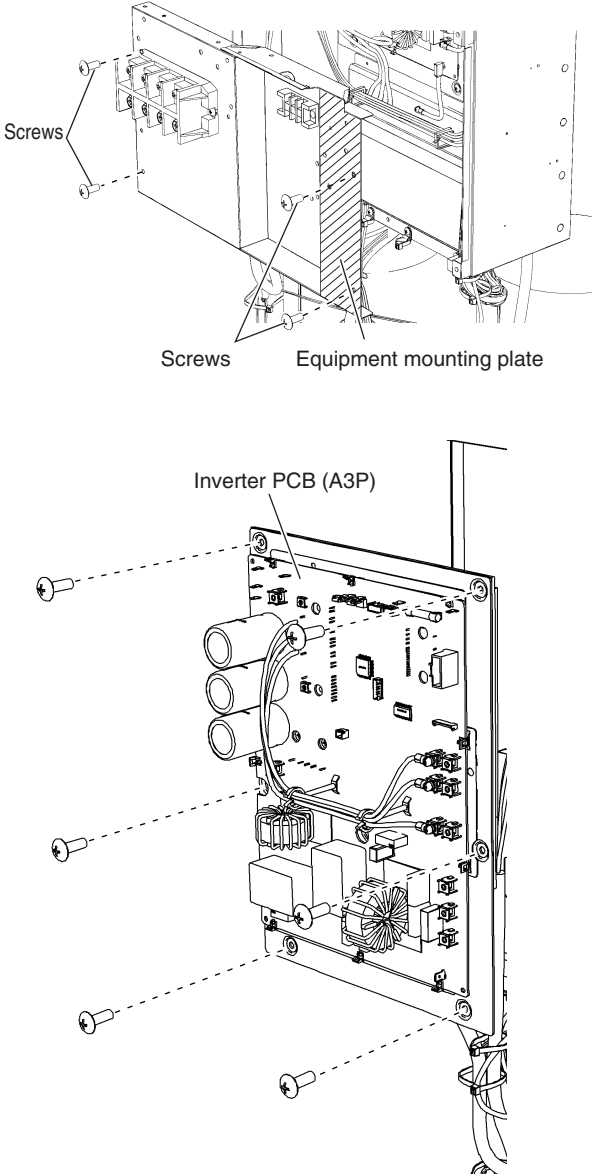
Procedure



Warning

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

Step	Procedure	Points	
<ul style="list-style-type: none"> ■ Remove the front panel (middle) according to "Procedure to Remove Related to Outside Panel". ■ Remove the electrical component box cover according to "Procedure to Remove Fan Motor". 		<ul style="list-style-type: none"> ■ Sectional view of the mounting position of a locking guard spacer 	
<p>1. Remove the main PCB (A1P)</p>			<p>1 Disconnect all the connectors from the main PCB.</p>
<p>2 Remove the head of the locking guard spacer to pull out the main PCB (A1P). (9 places)</p> <p>Removal from the locking guard spacer</p>			

Step	Procedure	Points
2. Remove the QA transmission PCB (A6P)	<ol style="list-style-type: none"> 1 Disconnect the connector from the PCB (A6P). 2 Remove the screw and clamp of the earth wire connects with PCB. 3 Remove the head of locking guard spacer to pull out QA transmission PCB. 	<p>■ Locking guard spacer mounting condition</p> 
3. Remove the inverter PCB (A3P)	<ol style="list-style-type: none"> 1 Unscrew the 2 screws to remove the main PCB mounting plate. 2 Unscrew the 4 screws to remove the equipment mounting plate. 3 Disconnect all the connectors from the inverter PCB. 4 Unscrew the 6 screws to remove the inverter PCB (A3P). 	

5. Procedure to Remove Electronic Expansion Valve and Solenoid Valve

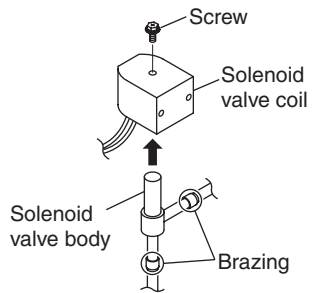
Procedure

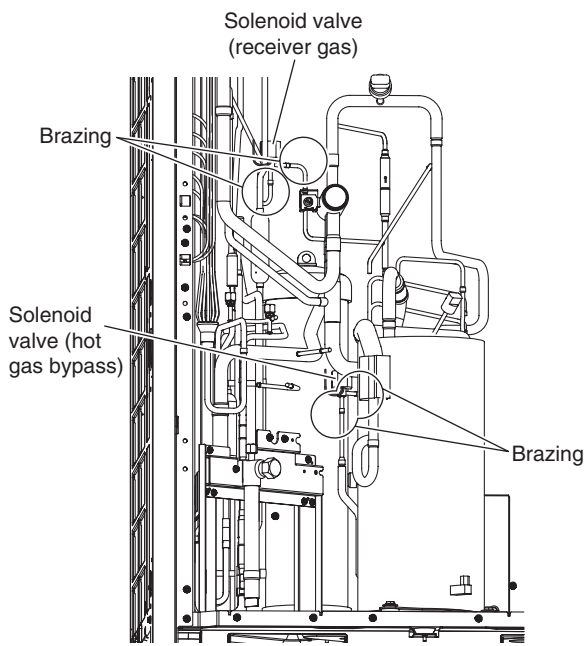


Warning

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

Step	Procedure	Points
<ul style="list-style-type: none"> ■ Remove the front panel according to "Procedure to Remove Related to Outside Panel. ■ Remove the electrical component box according to "Procedure to Remove Electrical Component Box. 		<ul style="list-style-type: none"> ■ Precaution for mounting the coil for the solenoid valve <p style="text-align: center;">↓</p> <p>Align the dimple of the solenoid valve and the stopper of the coil for the solenoid valve, and then push them in until you hear them click.</p>
<p>1. Remove the electronic expansion valve</p>		
<p>1 Rotate the electronic expansion valve (main) coil by 20 – 30 degrees and then pull it up.</p>		
<p>2 Remove the brazing from the 2 places to remove the electronic expansion valve (main) body.</p>		
<p>3 Rotate the electronic expansion valve (super cooling) coil by 20 – 30 degrees and then pull it up.</p>		
<p>4 Remove the brazing from the 2 places to remove the electronic expansion valve (subcooling) body.</p>		

Step	Procedure	Points
2.	Remove the solenoid valve	<ul style="list-style-type: none"> ■ Removal of the solenoid valve
1	Unscrew 1 screw to remove each coil for the solenoid valve.	
2	Remove the brazing from the 2 places to remove each body of the solenoid valve.	<ul style="list-style-type: none"> ■ Before conducting brazing work, make sure that the refrigerant is completely removed. ■ For mounting the electronic expansion valve body, conduct brazing work while cooling the valve with wet cloths or else in order to prevent the electronic expansion valve from exceeding a temperature of 120°C.



6. Procedure to Remove Pressure Switch, Pressure Sensor, Four Way Valve

Procedure



Warning

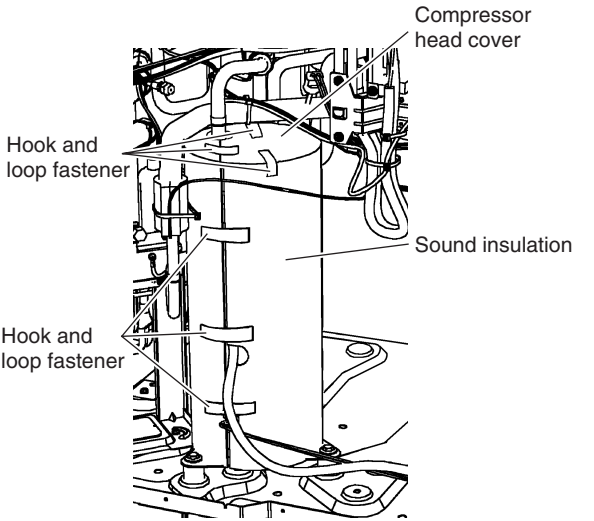
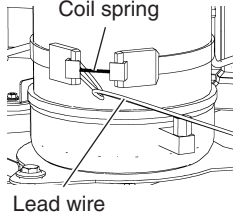
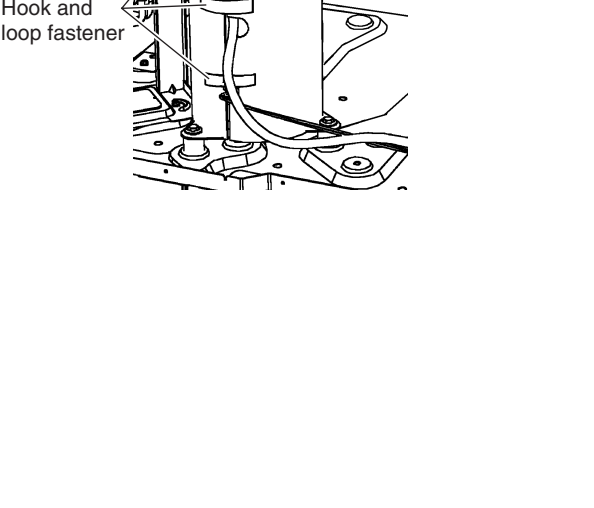
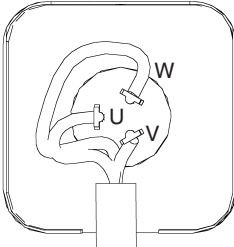
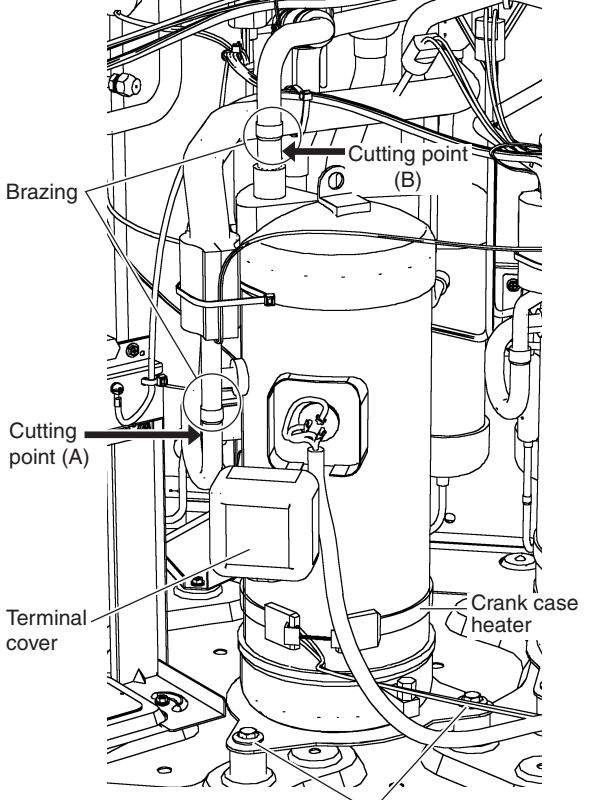
Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points	
<ul style="list-style-type: none"> ■ Remove the front panel according to "Procedure to Remove Related to Outside Panel". ■ Remove the electrical component box according to "Procedure to Remove Electrical Component Box". 	<p>High pressure sensor (S1NPH)</p> <p>Low pressure sensor (S1NPL)</p> <p>High pressure switch (S1PH)</p>	<ul style="list-style-type: none"> ■ The pressure sensor can be removed without draining the refrigerant. (A check valve is provided.) ■ Use 2 spanners pressure sensor. 	
1. Remove the pressure switch			
1 Disconnect the connector (X2A) for the high pressure switch.			
2 Remove the brazing from the 1 place to remove the high pressure switch.			
2. Remove the pressure sensor			
1 Disconnect the connector (X32A) for the high pressure sensor.			
2 With 2 spanners, remove the high pressure sensor.			
3 Disconnect the connector (X31A) for the low pressure sensor.			
4 With 2 spanners remove the low pressure sensor.			

Step	Procedure	Points
3.	Remove the four way valve	
1	Disconnect the connector (X9A) for the four way valve coil.	<ul style="list-style-type: none"> ■ Before conducting brazing work, make sure that the refrigerant is completely removed. ■ Use an iron plate or other materials to protect other wiring from the direct impact of the flame of the gas welding machine. ■ For mounting the four way valve body, conduct brazing work while cooling the valve with wet cloths or else in order to prevent the four way valve from exceeding a temperature of 120°C.
2	Unscrew the screw to remove the four way valve coil.	
3	Remove brazing from the 4 places and then remove the four way valve body.	

7. Procedure to Remove Compressor

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

Step	Procedure	Points	
<ul style="list-style-type: none"> ■ Remove the front panel according to "Procedure to Remove Related to Outside Panel". ■ Remove the electrical component box according to "Procedure to Remove Electrical Component Box". 	 <p>Compressor head cover</p> <p>Hook and loop fastener</p> <p>Sound insulation</p> <p>Hook and loop fastener</p>	<ul style="list-style-type: none"> ■ Before working, make sure that the refrigerant is completely removed. ■ Precautions for mounting the crank case heater <ul style="list-style-type: none"> • Avoid overlap with the welded part of the compressor. • Place the coil spring for the heater between the lead wires.  <p>Coil spring</p> <p>Lead wire</p>	
<p>1. Remove the sound insulation</p>		 <p>Hook and loop fastener</p> <p>Coil spring</p> <p>Lead wire</p>	<ul style="list-style-type: none"> ■ Compressor terminal markings 
<p>2. Remove the crank case heater</p>			<p>1 Remove the coil spring to pull out the crank case heater.</p>
<p>3. Remove the compressor</p>	 <p>Brazing</p> <p>Cutting point (B)</p> <p>Cutting point (A)</p> <p>Terminal cover</p> <p>Crank case heater</p> <p>Bolts fixing the compressor (3 places (1 place in the rear))</p>		<ul style="list-style-type: none"> ■ When the piping is cut, oil comes out. Before cutting the piping, place rag under the piping for the purpose of curing.
<p>1 Remove the compressor terminal cover.</p>			
<p>2 Disconnect the lead wire from the compressor terminal area.</p>			
<p>3 Unscrew 3 bolts that fix the compressor.</p>			
<p>4 Cut the discharge pipe (A) and suction pipe (B) using a pipe cutter.</p>			
<p>5 Lift the compressor and pull it toward you.</p>			
<p>6 Remove brazing from the remaining piping.</p>			

8. Procedure to Remove Thermistor

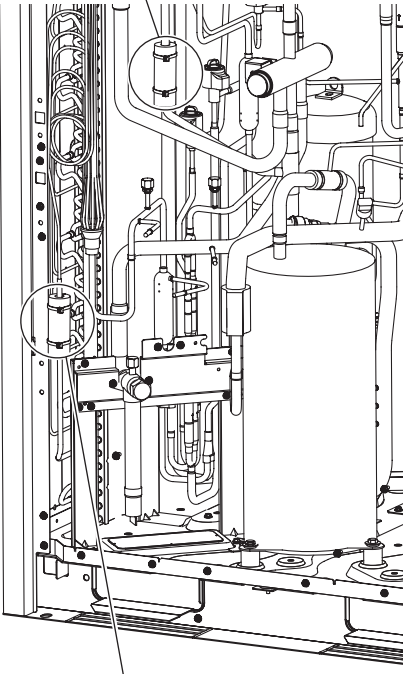
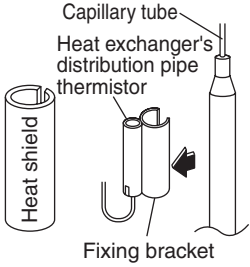
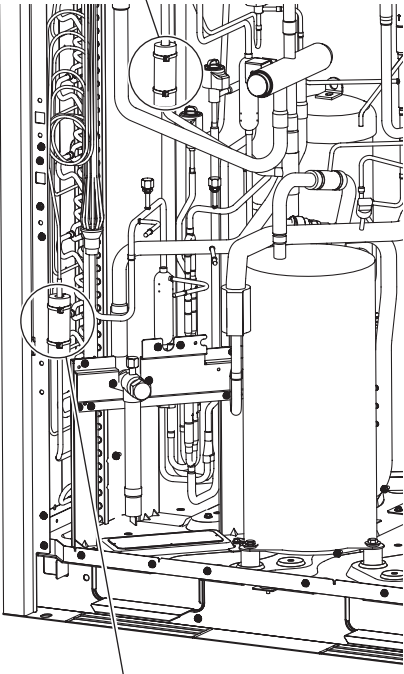
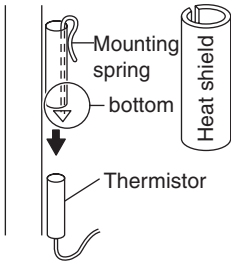
Procedure



Warning

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

Step	Procedure	Points	
<p>■ Remove the front panel (middle, bottom) according to "Procedure to Remove Related to Outside Panel".</p>		<p>■ Removal of the outdoor air thermistor</p>	
<p>1. Remove the outdoor air thermistor</p>			
<p>1 Apply the principle of leverage to remove the clamps.</p> <p>2 Pull out the fixture from the outdoor air thermistor.</p>			
<p>2. Remove the suction pipe thermistor</p>		<p>■ Removal of the suction pipe thermistor</p>	
<p>1 Cut the clamps (2 places) for the heat shield.</p> <p>2 Push the lower part of the mounting spring to pull out the suction pipe thermistor.</p>			
<p>3. Remove the discharge pipe thermistor</p>			<p>■ Removal of the discharge pipe thermistor</p>
<p>1 Cut the clamps (1 place) for the heat shield.</p> <p>2 Push the lower part of the mounting spring to pull out the discharge pipe thermistor.</p>			

Step	Procedure	Points
4. Remove the heat exchanger's distribution pipe thermistor		<ul style="list-style-type: none"> ■ Removal of the heat exchanger's distribution pipe thermistor
<ol style="list-style-type: none"> 1 Cut the clamps (2 places) for the heat shield. 2 Pull hard the heat exchanger's distribution pipe thermistor together with the fixing bracket toward you. 	 <p style="text-align: center;">Heat exchanger's intermediate temperature thermistor (R5T)</p>	 <p style="text-align: center;">Capillary tube Heat exchanger's distribution pipe thermistor Heat shield Fixing bracket</p>
5. Remove the heat exchanger's intermediate temperature thermistor		<ul style="list-style-type: none"> ■ Removal of the heat exchanger's intermediate temperature thermistor
<ol style="list-style-type: none"> 1 Cut the clamps (2 places) for the heat shield. 2 Push the lower part of the fixing spring to pull out the heat exchanger's intermediate temperature thermistor. 	 <p style="text-align: center;">Heat exchanger's distribution pipe thermistor (R4T)</p>	 <p style="text-align: center;">Mounting spring bottom Heat shield Thermistor</p>

Revision History

Month / Year	Version	Revised contents
07 / 2013	Si261304E	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.



JMI-0107

Organization:
DAIKIN INDUSTRIES, LTD.
AIR CONDITIONING MANUFACTURING DIVISION

Scope of Registration:
THE DESIGN/DEVELOPMENT AND MANUFACTURE OF
COMMERCIAL AIR CONDITIONING, HEATING, COOLING,
REFRIGERATING EQUIPMENT, HEATING EQUIPMENT,
RESIDENTIAL AIR CONDITIONING EQUIPMENT, HEAT
RECLAIM VENTILATION, AIR CLEANING EQUIPMENT,
COMPRESSORS AND VALVES.



EC99J2044

All of the Daikin Group's business facilities and subsidiaries in Japan are certified under the ISO 14001 international standard for environment management.

Dealer

DAIKIN INDUSTRIES, LTD.

Head Office:
Umeda Center Bldg., 2-4-12, Nakazaki-Nishi,
Kita-ku, Osaka, 530-8323 Japan

Tokyo Office:
JR Shinagawa East Bldg., 2-18-1, Konan,
Minato-ku, Tokyo, 108-0075 Japan

http://www.daikin.com/global_ac/

©All rights reserved