

REMOVAL PROCEDURE



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

4/5/6 HP Class

-  Outdoor Unit
-  Inverter
-  Pair Type



Service Manual Removal Procedure

Outdoor Unit

Applicable Models

●Heat Pump

RZQ100KAVLT

RZQ125KATLT

RZQ140KATLT

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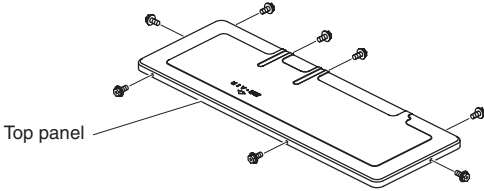
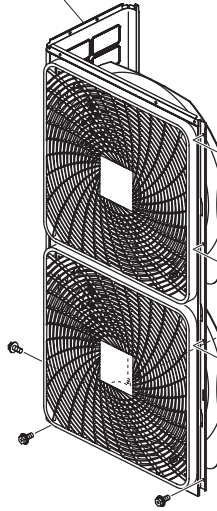
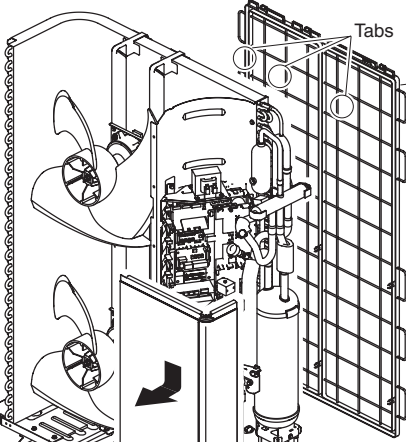
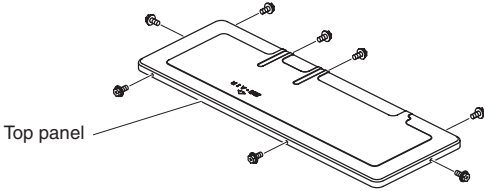
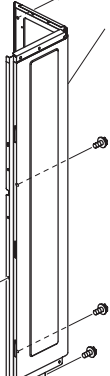
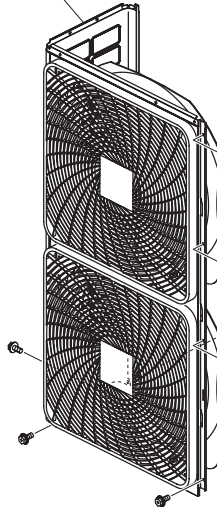
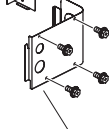
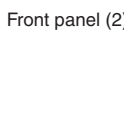
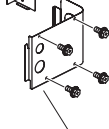
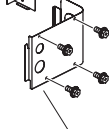
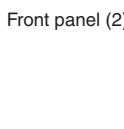
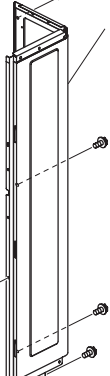
1. Procedure to Remove Outside Panels

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	Pull the 7 tabs at the bottom of the suction grille to the front, and then disengage the tabs at the top with a screwdriver or else. After that, hold down the whole suction grille to remove it.	 <p>Top panel</p>	
2	Unscrew the 1 screw that fixes the front panel (2) (i.e., the front panel on the side), and then remove this front panel.	 <p>Front panel (1)</p>	 <p>Tabs</p> <p>Suction grille</p>
3	Unscrew the 8 screws that fix the top panel, and then remove the top panel.	 <p>Top panel</p>	 <p>Side rear-panel</p>
4	Unscrew the 7 screws that fix the front panel (1), and then remove this front panel.	 <p>Front panel (1)</p>	 <p>Side piping cover bracket</p>
5	Unscrew the 1 screw that fix the front piping cover bracket, and then remove this bracket.	 <p>Front piping cover bracket</p>	 <p>Side piping cover bracket</p>
6	Unscrew the 4 screws that fix the side piping cover bracket, and then remove this bracket.	 <p>Side piping cover bracket</p>	 <p>Front piping cover bracket</p>
7	Unscrew the 5 screws that fix the side rear-panel, and then remove this panel.	 <p>Side rear-panel</p>	

2. Procedure to Remove Propeller Fan and Fan Motor

Procedure



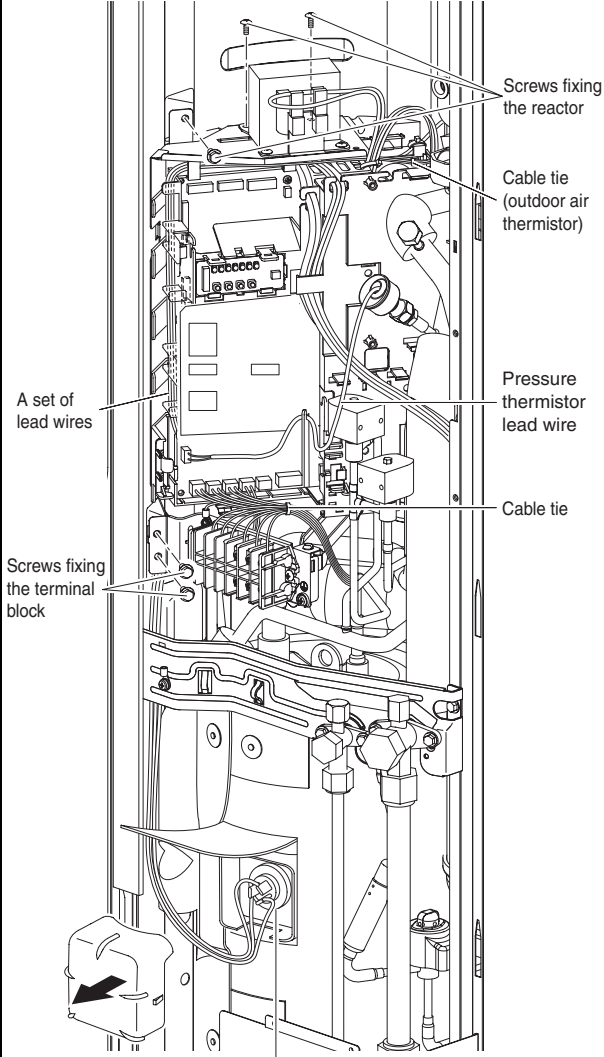
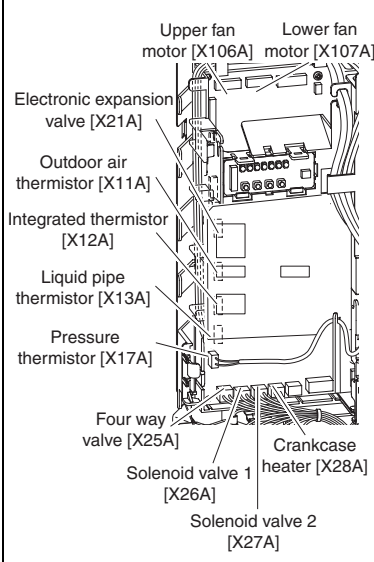
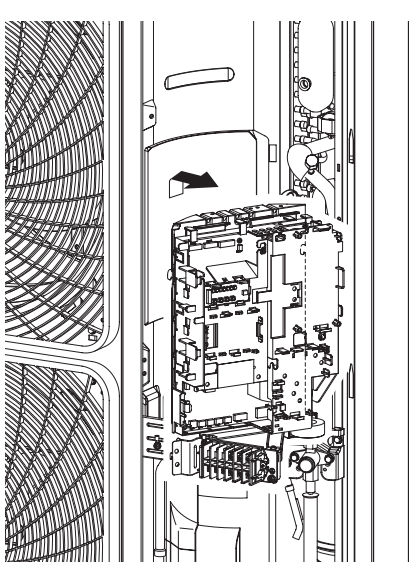
Warning

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

Step	Procedure	Points
<p>■ Remove the front panel (2) according to the procedure for removing outside panels.</p>		
<p>1. Removing the propeller fan</p>		
<p>1 Disengage the 4 tabs at the top and bottom of the discharge grille to remove the 4 mounting screws, and dismount the discharge grille.</p> <p>2 Remove the fan setting nut on the propeller fan.</p>		
<p>2. Removing the fan motor</p>		
<p>■ Remove the front panel (1) according to the procedure for removing outside panels.</p>		
<p>1 Disconnect the connector for fan motor from the PCB provided in the switch box.</p>		<p>■ To disconnect the connector, do not pull the lead wire. Hold the connector section and press the tabs.</p>
<p>2 Cut the cable tie of lead wires (located on the reverse side of the stop valve mounting plate).</p>		<p>■ Precaution for mounting the motor Be sure to fix the motor lead wires with clamps. Not doing so may cause the lead wires to get entangled with the fan, thus resulting in damage to the fan.</p>
<p>3 Pull out the lead wires through the opening of the partition panel, and then unclamp the 3 clamps. (Note that the partition plate has 3 tabs.)</p>		
<p>4 Unfasten to remove the 4 bolts that fix the fan motor, and then take out this motor.</p>		

3. Procedure to Remove Switch Box

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 (2) according to the procedure for removing outside panels.</p>		<p>■ If the top panel cannot be removed</p> <p style="text-align: center;">↓</p> <p>Even though workability is degraded, it is possible to pull the switch box to the front without removing the top panel.</p>
<p>1 Disconnect each connector on the PCB. (Refer to the Points column.)</p>		<p>■ The figure below shows connectors to be disconnected.</p>
<p>2 Remove the 2 faston terminals. After that, unscrew the 3 screws that fix the reactor, and then remove the reactor.</p>		
<p>3 Cut the cable tie.</p>		
<p>4 Remove the clamp of the pressure thermistor lead wire.</p>		
<p>5 Cut the cable tie of the outdoor air thermistor.</p>		
<p>6 Disconnect a set of lead wires together from the clamp.</p>		
<p>7 Remove the terminal cover, and then disconnect the 3 lead wires from the terminal block for the compressor.</p>		
<p>8 Unscrew the 2 screws that fix the terminal block.</p>		
<p>9 Disengage the 3 tabs, and then pull out the switch box upward.</p>		
		<p>■ Precaution for mounting the pressure thermistor</p> <p style="text-align: center;">↓</p> <p>To prevent the lead wire from hanging over the PCB, hook the lead wire of 160 to 170 mm in length from the front end of the connector on the clamp.</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
<p>■ Remove the top panel and the front panel (2) according to the procedure for removing outside panels.</p>		
<p>1. Removing the PCB (A2P)</p>		
<p>1 Disconnect the connector (X205A) from the PCB.</p> <p>2 While pressing the 2 tabs, remove the PCB (A2P).</p>		
<p>2. Removing the PCB (A1P)</p>		
<p>■ Remove the switch box according to the procedure for removing the switch box.</p>		
<p>1 Remove the clamp from the compressor harness.</p> <p>2 Press the tabs to remove the terminal block.</p> <p>3 Cut the 2 cable ties (A).</p> <p>4 Extend the tabs, and then remove the support leg of the cover of electrical components.</p> <p>5 Disengage the 3 tabs on the left side, and then while pushing down the 2 tabs on the right side, remove the whole cover of the electric components.</p> <p>6 Cut the cable tie (B).</p> <p>7 Disconnect the connector listed in point column.</p> <p>8 Remove the PCB (A1P) together with the radiating fin.</p>		<p>■ Connectors used on the PCB</p> <ul style="list-style-type: none"> • Compressor (X102A) • Ground cable (E1) • Reactors (P1 and P2) • Power supply cable (X1A) • Indoor-Outdoor connection cable (X803A)

5. Procedure to Remove Pressure Thermistor, Solenoid Valve and 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	
<p>■ Remove the top panel and the front panel (2) according to the procedure for removing outside panels.</p>			
<p>1. Removing the pressure thermistor</p>			
<p>1 Disconnect the pressure thermistor connector (X17A).</p> <p>2 Use 2 spanners to remove the pressure thermistor.</p>			
<p>2. Removing the solenoid valve</p>			
<p>1 Disconnect the solenoid valve connector (X26A or X27A).</p> <p>2 Unscrew the 1 screw that fixes the coil for the solenoid valve, and then remove the coil.</p> <p>3 Remove brazing from the 2 places, and then remove the solenoid valve.</p>			<p>■ Before removing the solenoid valve or the electronic expansion valve, be sure to recover the refrigerant.</p>
<p>3. Removing the electronic expansion valve</p>			
<p>1 Disconnect the electronic expansion valve connector (X21A).</p> <p>2 Pull out the coil for the electronic expansion valve coil upward.</p> <p>3 Remove brazing from the 2 places, and then remove the electronic expansion valve.</p>		<p>■ Precaution for mounting the coil for the electronic expansion valve</p> <p style="text-align: center;">↓</p> <p>Align the dimple of the electronic expansion valve and the stopper of the coil for the electronic expansion valve, and then press them in until you hear them click.</p>	

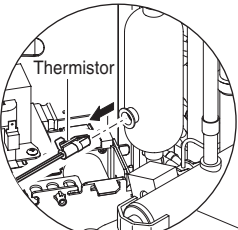
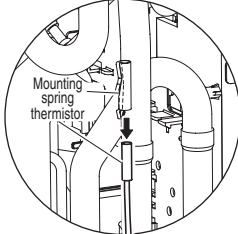
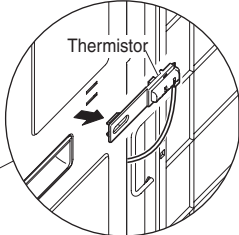
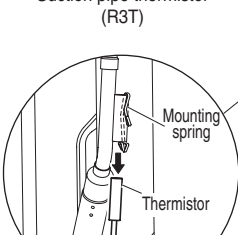
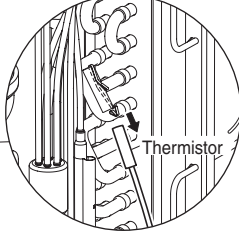
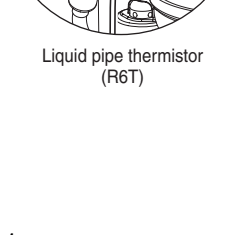
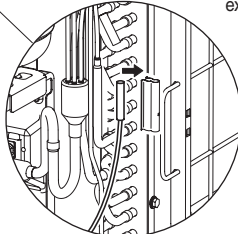
6. Procedure to Remove Thermistor

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 top panel and the front panel (2) and side panel according to the procedure for removing outside panels.</p>	 <p>Thermistor</p> <p>Discharge pipe thermistor (R2T)</p>	
<p>1 Pull out the outdoor air thermistor to the front, and then slide this thermistor to the right to remove it.</p>	 <p>Mounting spring thermistor</p>	 <p>Thermistor</p> <p>Outdoor air thermistor (R1T)</p>
<p>2 Pinch the mounting spring that fixes the discharge pipe thermistor to pull out this thermistor.</p>	 <p>Suction pipe thermistor (R3T)</p>	 <p>Thermistor</p> <p>Intermediate heat exchanger thermistor (R5T)</p>
<p>3 Press the fixing section of the suction pipe thermistor to pull out this thermistor.</p>	 <p>Mounting spring</p> <p>Thermistor</p> <p>Liquid pipe thermistor (R6T)</p>	 <p>Heat exchanger distribution pipe thermistor (R4T)</p>
<p>4 Pull the fixing bracket of the heat exchanger's distribution pipe thermistor to the front, and then remove this thermistor.</p>	<p>*1 The heat exchanger's distribution pipe thermistor, intermediate heat exchanger thermistor, and liquid pipe thermistor are joined together with a single connector. Consequently, these 3 thermistors should be replaced at the same time.</p>	
<p>5 Press the fixing section of the intermediate heat exchanger thermistor to pull out this thermistor.</p>		
<p>6 Press the fixing section of the liquid pipe thermistor to pull out this thermistor.</p>		

7. Procedure to Remove 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"> ■ Recover the refrigerant. ■ According to the procedure for the removal related to the outside panel, remove the front panel (2) and the side panel. ■ According to the procedure for the removal of switch box, remove the switch box. 		<ul style="list-style-type: none"> ■ Be sure to remove the four way valve only after the refrigerant is completely recovered.
<p>1 Unscrew the 1 screw that fixes the coil for the four way valve, and then remove this coil.</p> <p>2 Remove brazing from the 4 places, and then remove the four way valve. (Refer to point column.)</p>		<ul style="list-style-type: none"> ■ To prevent the four way valve from exceeding a temperature of 120°C, conduct brazing work while cooling the valve with wet cloths or else.

8. 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"> ■ Recover the refrigerant. (Refer to point column.) ■ Remove the front panel (2) and the front piping cover bracket. 		<ul style="list-style-type: none"> ■ Be sure to remove the compressor only after the refrigerant is completely recovered.
<p>1 Unscrew the 5 screws that fix the stop valve mounting plate, and then remove this mounting plate.</p>		<ul style="list-style-type: none"> ■ Terminal block
<p>2 Remove the gas piping and the liquid piping.</p>		
<p>3 Remove the compressor terminal cover.</p>		<ul style="list-style-type: none"> ■ One out of the nuts that fix the compressor is located outside of the partition panel.
<p>4 Disconnect the lead wires from the terminal block.</p>		
<p>5 Loosen the 2 strings, and then pull out the sound insulation of the compressor.</p>		<ul style="list-style-type: none"> ■ Be sure to cut 3 pipes by using a pipe cutter before disconnecting the brazed sections of pipes. A sudden disconnection of the brazed sections can cause oil to catch fire.
<p>6 Unfasten to remove the 3 nuts that fix the compressor. (Refer to point column.)</p>		
<p>7 Cut the suction pipe and the discharge pipe using a pipe cutter. (Refer to point column.)</p>		<p>Removal Procedure</p>
<p>8 Remove brazing from the 3 places.</p>		<p>9</p>
<p>9 Lift to pull out the compressor.</p>		

Revision History

Month / Year	Version	Revised contents
06 / 2013	Si281315E	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.



JQA-1452

Organization:
DAIKIN INDUSTRIES
(THAILAND) LTD.

Scope of Registration:
THE DESIGN/DEVELOPMENT AND MANUFACTURE OF AIR CONDITIONERS AND THE COMPONENTS INCLUDING COMPRESSORS USED FOR THEM



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

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