



# 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**

**RZQ100HY4A**

**RZQ125HY4A**

**RZQ160HY4A**

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# 1. Procedure to Remove Outside Panels

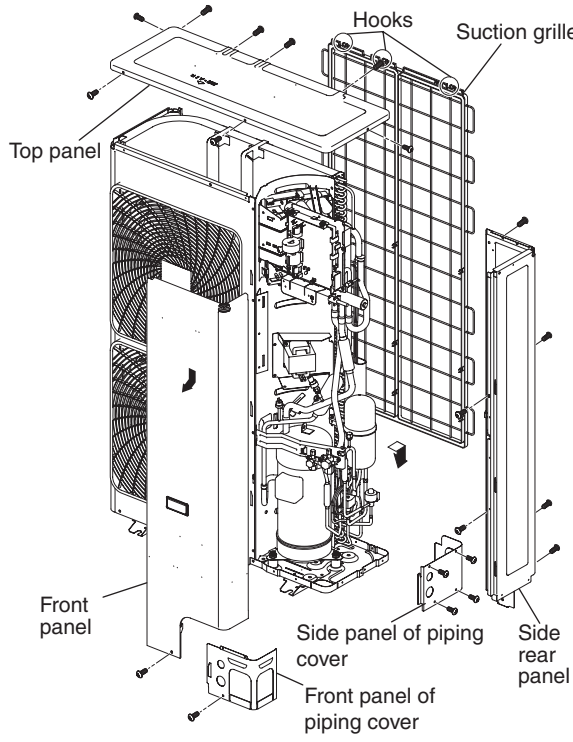
**Procedure**



**Warning**

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

Step	Procedure	Points
1	For the suction grille, pull the lower parts (in 7 places) frontward, disengage the hooks at the top of the grille with a slotted screwdriver, and then press the overall grille downward to disassemble it.	
2	For the front panel (side front panel), unscrew a single mounting screw and then press this panel downward to remove it.	
3	For the top panel, unscrew the 8 mounting screws and then remove this panel.	
4	For the front panel of the piping cover, unscrew a single mounting screw and then remove this panel.	
5	For the side panel of the piping cover, unscrew the 4 mounting screws and then remove this panel.	
6	For the side rear panel, unscrew the 6 mounting screws and then remove this panel.	



# 2. Procedure to Remove Propeller Fan and Fan Motor

**Procedure**



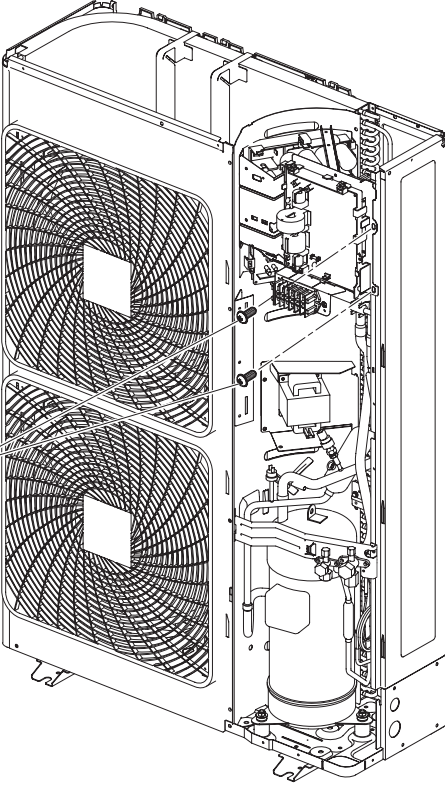
**Warning**

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

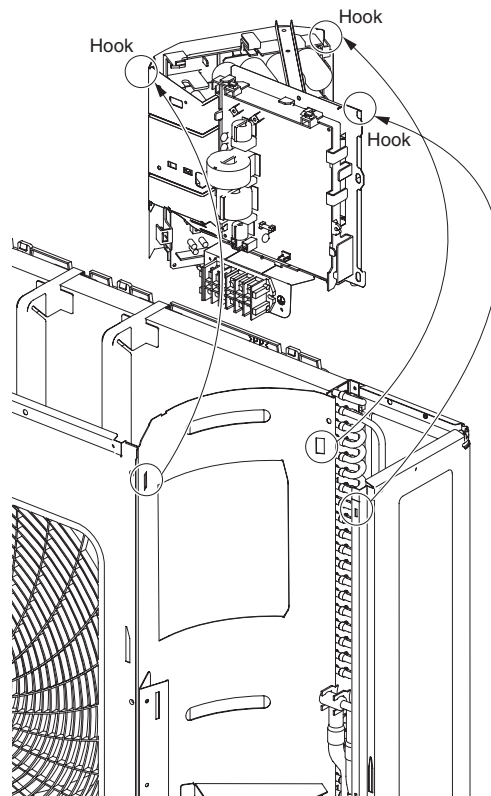
Step	Procedure	Points
<p>■ Remove the front and top panels in accordance with the Procedure to remove Outside Panels.</p>		
<p>1. Remove the propeller fan</p>		
<p>1 Unscrew the 4 screws that fix the air discharge grille and disengage the 4 hooks at the top and bottom of the grille, and then remove this air discharge grille.</p> <p>2 Unfasten the fan lock nut that fixes the propeller fan.</p>		
<p>2. Remove the fan motor</p>		
<p>1 Remove the connector for the fan motor from the PCB. (X206A, X207A)</p> <p>2 The lead wire is clamped in 3 places. (Click on partition plate x 3 places)</p> <p>3 Unscrew the 3 screws that fix the front panel and then pull up the lead wire.</p> <p>4 Unfastening the 4 lock bolts from the fan motor enables the removal of this fan motor.</p>		<p>■ In order to disconnect the connector, do not pull the lead wire. Hold the connector part and then press the hooks.</p> <p>■ Cautions in mounting the motor Be sure to fix the motor lead wire with a clamp. Not heeding this caution will cause the entanglement of the lead wire around the fan, which will result in damage to the fan.</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
<ul style="list-style-type: none"> <li>■ Remove the front and top panels in accordance with the Procedure to remove Outside Panels.</li> </ul>		<ul style="list-style-type: none"> <li>■ If the top panel cannot be removed, this switch box will be able to be dismantled without removing the top panel.</li> </ul>
<p>1</p> <ul style="list-style-type: none"> <li>Remove all connectors and Fasten terminals, which have a connection to the switch box.                             <ul style="list-style-type: none"> <li>■ Remove the lead wire from the terminal of the high pressure switch.</li> <li>■ Remove the lead wire of the compressor from the terminal cover of this compressor.</li> <li>■ Disconnect the relay connector from the lead wire of the reactor.</li> <li>■ Disconnect the relay connector(s) from the lead wire of the fan motor(s).</li> <li>■ Remove the lead wire from the terminal of the high pressure switch and low pressure sensor.</li> <li>■ Disconnect the respective connectors from the following parts on the PCB.                                     <ul style="list-style-type: none"> <li>• Each thermistor</li> <li>• Coil of four way valve</li> <li>• Coil of solenoid valve</li> </ul> </li> </ul> </li> </ul>		

Step	Procedure	Points
2	Unscrew the 2 screws that fix the switch box.	
3	In order to remove the switch box, disengage the 3 hooks (1 on the right and 2 on the left), and then pull out this switch box frontward or upward.	



# 4. Procedure to Remove PCB Assy (1)

**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, top and side panels in accordance with the Procedure to remove Outside Panels.</p>		<p><b>Note:</b> The plastic casing and the PCB are bonded to each other. Therefore, for the replacement of these parts, replace by a set of the PCB Assy.</p>
<p>1. Remove the PCB (for control)</p>		
<p>1</p> <p>Disconnect all connectors.</p> <ul style="list-style-type: none"> <li>■ Remove the lead wire from the terminal cover of the compressor.</li> <li>■ Remove the lead wire from the terminal of the high pressure switch and low pressure sensor.</li> <li>■ Disconnect the respective connectors from the following parts on the PCB.                             <ul style="list-style-type: none"> <li>• Each thermistor</li> <li>• Four way valve coil</li> <li>• Solenoid valve coil</li> </ul> </li> </ul>	<p>Fixing screw of PCB Assy (for control use)</p>	
<p>2</p> <ul style="list-style-type: none"> <li>■ Unscrew a single screw from the PCB Assy (for control use).</li> </ul>		
<p>3</p> <ul style="list-style-type: none"> <li>■ In order to remove the PCB (for control use) from a fixing plate, disengage the 3 hooks.</li> </ul>		



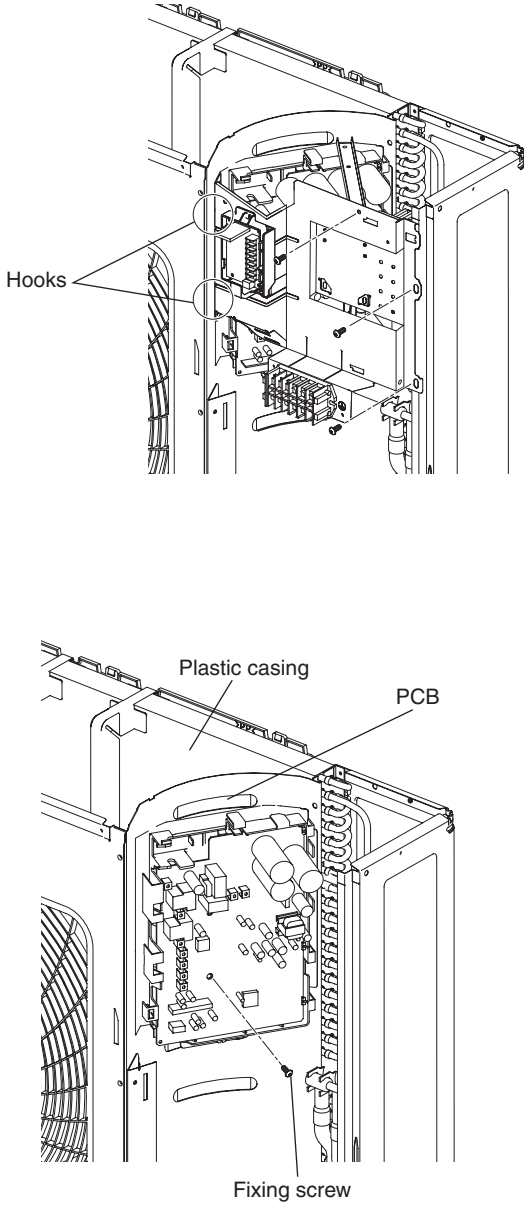
## 5. Procedure to Remove PCB Assy (2)

### Procedure



### Warning

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

Step	Procedure	Points
<p>2. Remove the PCB (for inverter)</p> <p>1 Disconnect all connectors.</p> <p>Unscrew the 3 screws that fix the mounting plate of electrical components (for control).</p> <p>2 Disengage the hooks in 2 places to remove the mounting plate of electrical components (for control).</p> <p>3 In order to remove the PCB assy (for inverter), unscrew a single screw.</p>	 <p>Hooks</p> <p>Plastic casing</p> <p>PCB</p> <p>Fixing screw</p> <p><b>i</b> <b>Note:</b> The plastic casing and the PCB are bonded to each other. Therefore, for the replacement of these parts, replace by a set of the PCB assy.</p>	

## 6. Procedure to Remove PCB Assy (3)

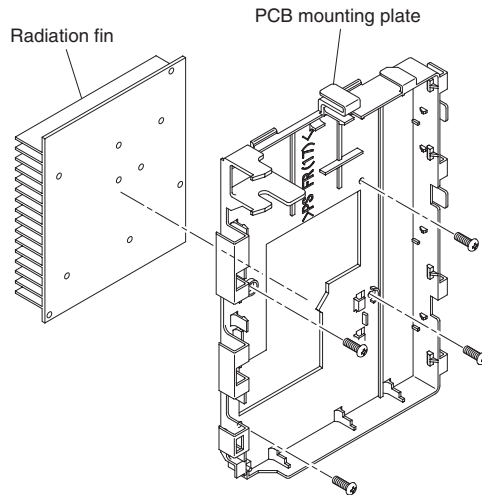
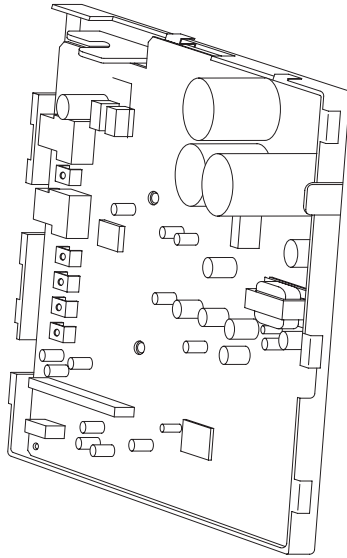
**Procedure**



**Warning**

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

Step	Procedure	Points
3.	Remove the PCB unit (for inverter).	
1	Unscrew the 4 screws that fix the PCB and the radiation fin.	
2	Disengage the 2 hooks, and then while peeling off silicon, remove the PCB (for inverter).	
3	Disengage the 4 mounting screws to remove the radiation fin.	



# 7. Procedure to Remove Low Pressure Sensor, Electronic Expansion Valve, and Others

**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 parts related to the outside panel and the switch box in accordance with the Procedure to remove Outside Panels.</p>			
<p>1. Remove the electronic expansion valve</p>			
<p>1 Pull out the coil from the electronic expansion valve upward. 2 Strip off the brazed sections in 2 places on the body of the valve and then remove this body.</p>			
<p>2. Remove the high pressure switch</p>			
<p>1 Disconnect the terminals from the high pressure switch and then strip off the brazed section on the switch.</p>			
<p>3. Remove the solenoid valve</p>			
<p>1 Unscrew a single screw from the solenoid valve coil and then remove this coil. 2 Strip off the brazed sections in 2 places on the main unit of the solenoid valve and then remove this body.</p>			
<p>4. Remove the low pressure sensor</p>			
<p>1 Disconnect the terminals from the low pressure sensor and then strip off the brazed section on the switch.</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 and top panels in accordance with the Procedure to remove Outside Panel and others</p>		
<p>1 In order to remove the discharge pipe thermistor, pinch the mounting spring and pull out this thermistor.</p>		
<p>2 For the heat exchanger distributor pipe thermistor, pull the clamp frontward and then remove this thermistor.</p>		
<p>3 In order to remove the outdoor air thermistor, pull out this thermistor frontward and then slide it to the right.</p>		
<p>4 For the suction pipe thermistor, pull this thermistor frontward and then remove it.</p>		

## 9. 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.

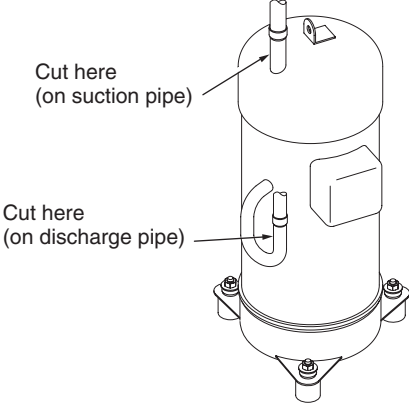
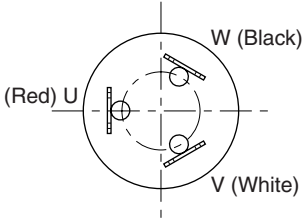
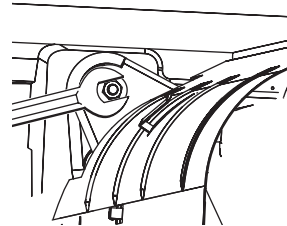
Step	Procedure	Points
<ul style="list-style-type: none"> <li>■ Remove the parts related to the outside panel and the switch box in accordance with the Procedure to remove Outside Panels.</li> </ul>		<ul style="list-style-type: none"> <li>■ Check to be sure there are no more refrigerants left in the unit before starting this removal.</li> <li>■ In order to prevent a gas welding flame from having influence on other pipes, protect them with a sheet or iron plate used for welding operation.</li> <li>■ <b>Caution:</b> While in installation of the four way valve, in order to prevent the main unit from reaching a temperature of 120°C or more, expose the valve to a flame while cooling it with a wet rag.</li> </ul>
<ol style="list-style-type: none"> <li>1 Unscrew a single screw that fixes the four way valve coil and then remove this coil.</li> <li>2 Strip off the brazed sections in 4 places on body of the four way valve and then remove this body.</li> </ol>		

# 10.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
<p>■ Remove the parts related to the outside panel and the switch box in accordance with the Removal Procedure for Outside Panels.</p>		<p>■ Check to be sure there are no more refrigerants left in the unit before starting this removal.</p>
<p>1 Unscrew the 5 screws from the stop valve mounting plate.</p>		<p>■ Color of terminal pins</p> 
<p>2 Disconnect the gas piping and liquid piping.</p>		<p>■ 1 of the 2 nuts that fix the compressor is located outside the partition plate.</p>
<p>3 Press the protrusion from both sides to remove the terminal cover.</p>		
<p>4 Remove the lead wires from the terminal pins.</p>		
<p>5 Remove the sound insulation (1), (2), and vibration-isolating putty.</p>		
<p>6 Unlock the nuts (*) that fix the compressor.</p> <p>A total of 3 nuts are provided.</p>		
<p>7 Strip off the brazed sections (in 2 places*). Before stripping off the brazed sections, be sure to cut the suction and discharge pipes with a pipe cutter. (See Caution in the column of Points.)</p>		
<p>8 Lift up the compressor to pull out it.</p>		

**Caution:**  
If the brazed sections are directly stripped off from the pipes, oil may catch fire. Be sure to cut the pipes in advance with a pipe cutter.

# Revision History

Month / Year	Version	Revised contents
01/2013	Si281317	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.

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