




# REMOVAL PROCEDURE



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

### 3 HP Class

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-  Outdoor Unit
-  Non-Inverter
-  Multi Type



# **Service Manual Removal Procedure**

## **Outdoor Unit**

### **Applicable Models**

#### **●Cooling Only**

R71KV1  
R71KY1  
R71KVAL

#### **●Heat Pump**

RY71KV1  
RY71KY1

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# 1. Procedure to Remove External Casing

**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 8 top plate screws.</p> <p>2 Remove the screw of the front piping cover.</p> <p>3 Remove the screw of the front casing and remove by pushing downward.</p> <p>4 Remove the 4 screws of the side piping cover.</p>		
<p>5 Remove the 5 screws of the rear/side casing.</p>		

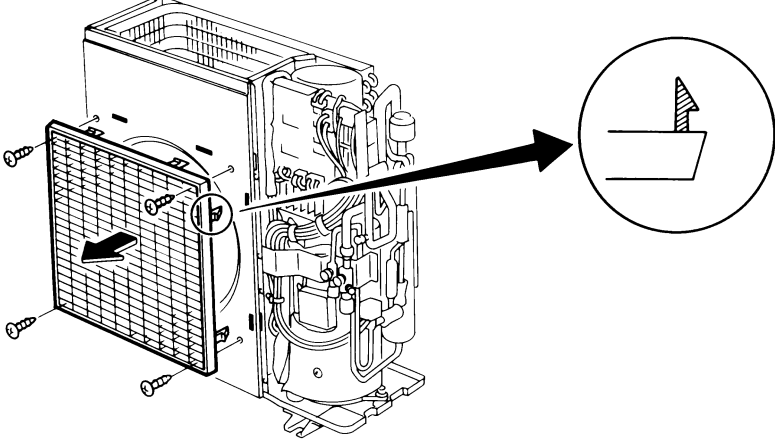
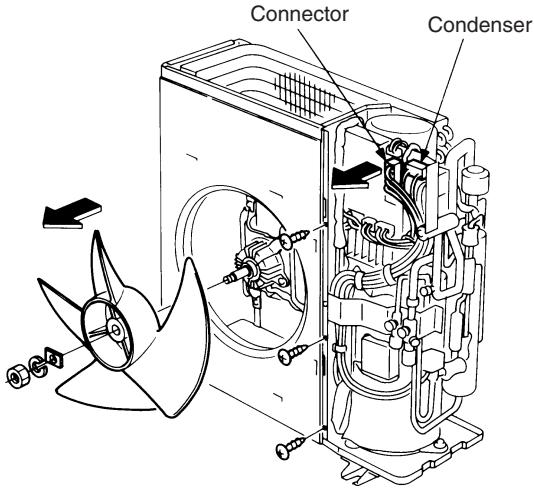
## 2. Procedure to Remove Outdoor Unit Fan and Fan Motor

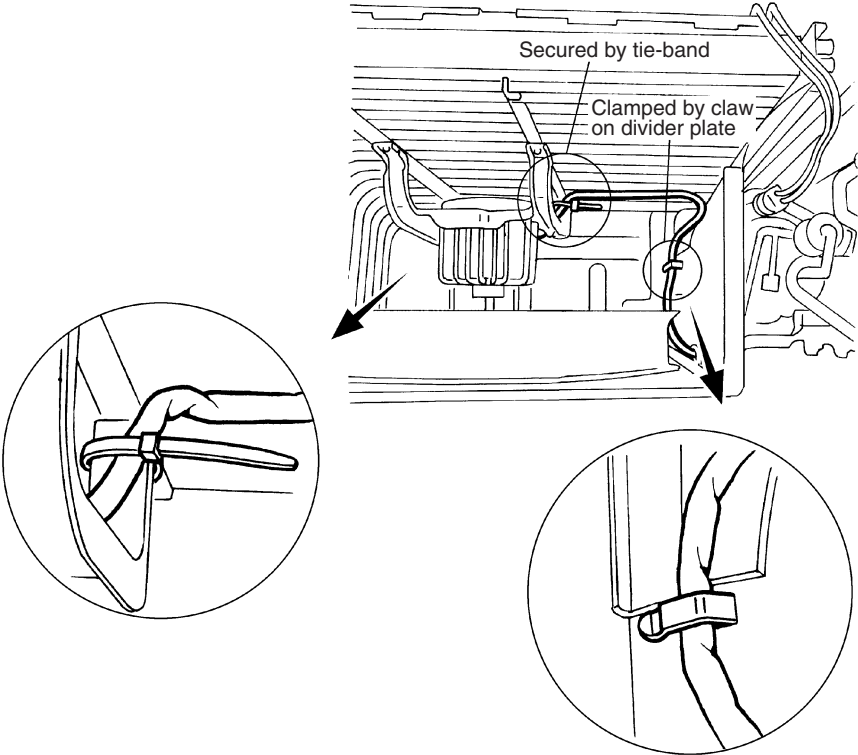
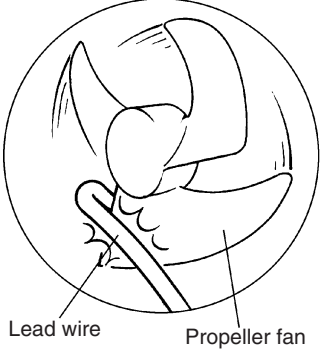
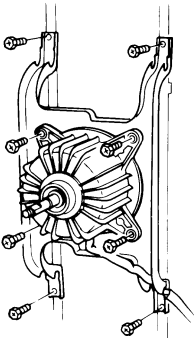
### Procedure



### Warning

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

Step	Procedure	Points
* Remove the front piping cover, etc., according to the procedure for removing the external casing.		
1 Remove the 4 screws and disconnect the 8 tabs fastening the air discharge grille on the top/bottom and left/right, and remove the air discharge grille.		
2 Remove the fan clamp fastening the propeller fan; remove the nut and washer.		
3 Disconnect the motor connector from the PCB's wiring connector, and remove the condenser.		<p><b>i Note:</b> The fan motor's lead wire cannot be disconnected as is. You must first remove the screw on the right side of the front casing (1).</p>

Step	Procedure	Points
<p>4</p> <p>Locate the 2 clamps holding the fan motor lead wire in place. *4 clamps in RY100 to 140K.</p>		 <p>Lead wire Propeller fan</p>
<p>5</p> <p>Remove the 4 hexagon bolts fastening the fan motor, and remove the fan motor.</p> <p>6</p> <p>The motor base can be dismantled by removing the 4 hexagon bolts.</p>		<p>Caution during motor installation Be sure to secure the motor lead wire with the clamp. Loose lead wire can be caught by fan and damaged.</p>

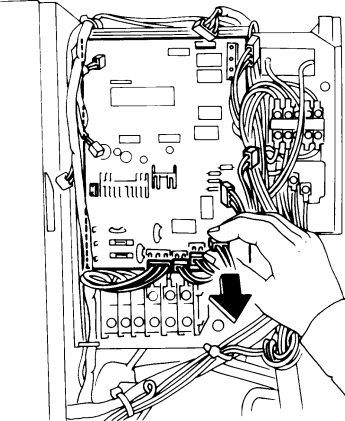
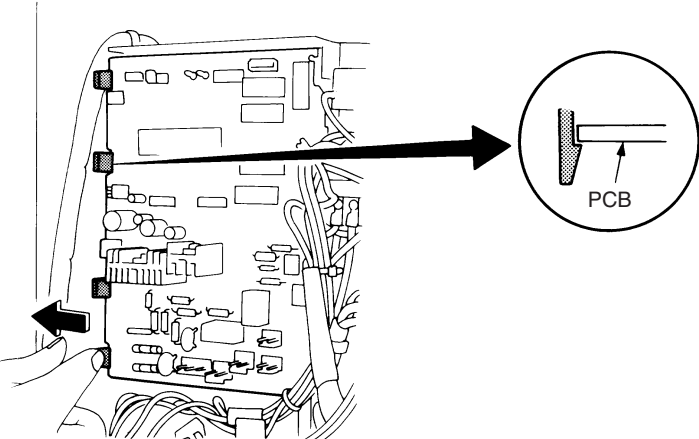
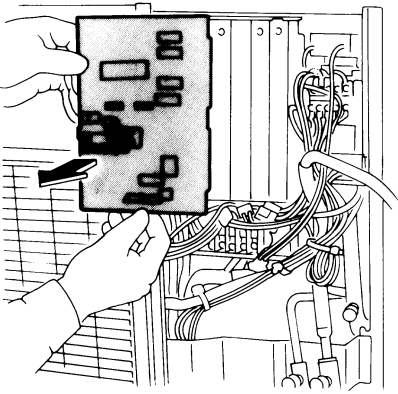
### 3. Procedure to Remove Outdoor Unit PCB

**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 plate, front casing and side casing according the procedure for removing the external casing, etc.</p>		
<p>1 Disconnect the connectors from the PCB.</p> <p>2 Unlatch the 4 tabs fastening the PCB on the left side, and disconnect from the hook on the right side.</p>		
<p>3 Remove the PCB.</p>		

# 4. Procedure to Remove Electrical Parts Box

**Procedure**

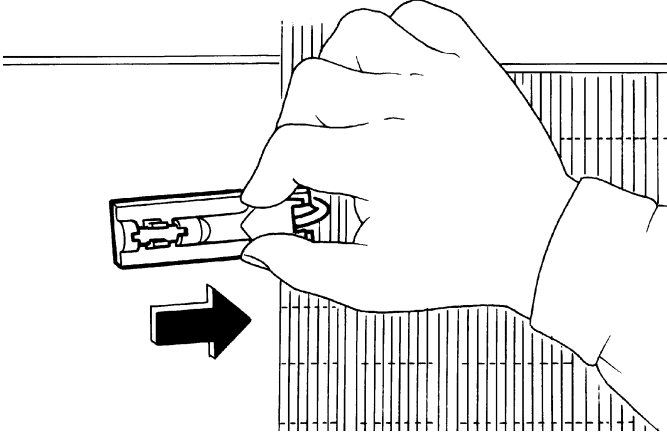
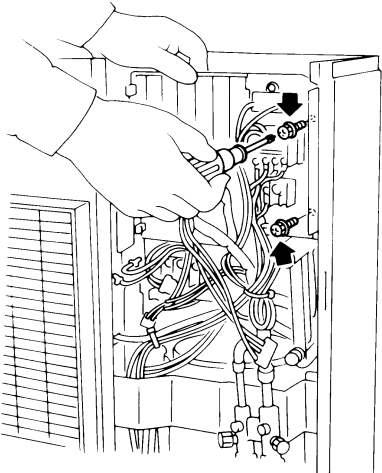
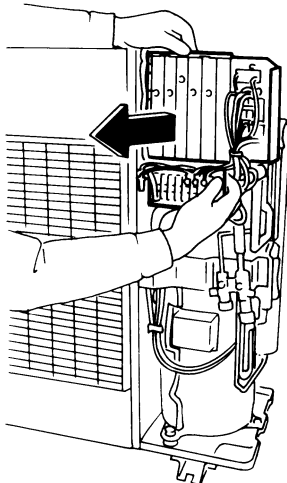
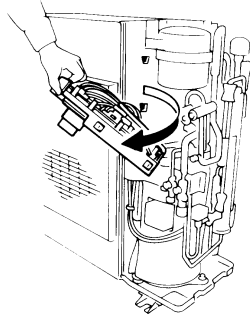


**Warning**

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

Step	Procedure	Points
<p>* Remove the top plate, front casing and side casing according the procedure for removing the external casing, etc.</p>	<p>&lt;In case of cooling only model&gt;</p>	<p>If the lead wire is clamped by the piping, etc., remove the clamp.</p>
<p>1 Remove the discharge pipe, heat exchanger and air thermistor. (If not removing, disconnect the connector from the PCB.) 1) Remove the discharge pipe thermistor.</p>	<p>&lt;In the case of heat pump units&gt;</p>	
<p>2) Remove the heat exchanger thermistor.</p>		<p>Pull up the thermistor to remove.</p>



Step	Procedure	Points
	<p>3) Remove the outdoor air thermistor.</p> 	
2	<p>Disconnect the motor operated valve coil, and crank case heater connectors from the PCB.</p>	
3	<p>Remove the El. compo. box installation screw.</p> 	<p><b>i Note :</b> If not dismantling the rear/side casing, remove the 2 screws of the El. compo. box.</p>
4	<p>Remove the El. compo. box by pulling it toward yourself and lifting.</p> 	<p><b>! Caution</b> Be careful of the lead wire protruding from the rear surface of the El. compo. box.</p> 

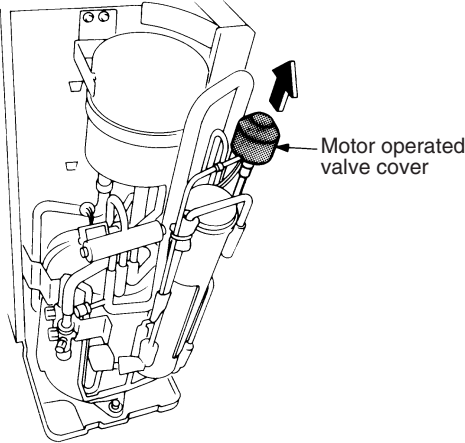
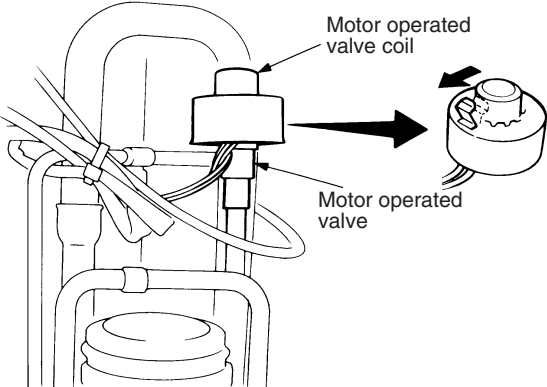
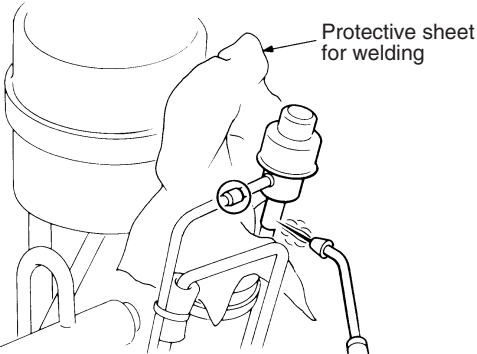
# 5. Procedure to Remove Electronic Expansion Valve and Solenoid Valve

**Procedure**



**Warning**

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

Step	Procedure	Points
* Make sure the refrigerant is completely empty.		
1	<p>Remove the electronic expansion valve cover.</p> 	
2	<p>The motor operated valve is removed by pulling while turning the electronic expansion valve coil's lever.</p> 	
3	<p>Use a metal plate or protective sheet for welding to prevent other pipes from being affected by the gas welding flame.</p> 	
4	<p>Heat the brazed part and remove.</p>	<p><b>i Note:</b> When installing, apply the flame while cooling with a leak cloth so that the temperature of the main body does not rise above 120°C.</p>

## 6. Procedure to Remove Four Way Valve and Coil

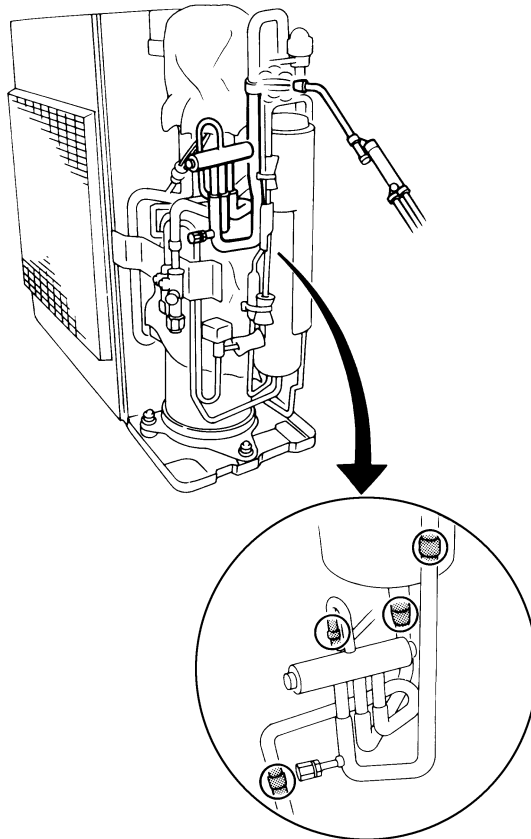
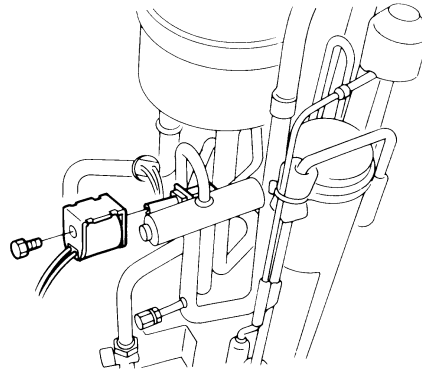
### Procedure



### Warning

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

Step	Procedure	Points
* Make sure the refrigerant is completely empty.		
1	Remove the external casing, etc., and electrical parts according to their removal procedures.	
2	Remove the four way valve.	
3	Heat the brazed parts of the four way valve, and remove the assembly from the piping side by drawing out with a pair of pliers, etc.	<p><b>i Note:</b> Apply the flame while cooling with a leak cloth so that the temperature of the main body does not rise above 120 °C.</p> <p><b>i Note:</b> When installing, first braze weld the four way valve and attached piping, then install the valve. Be sure to check the position angle of the piping when brazing.</p>



# 7. Procedure to Remove Compressor

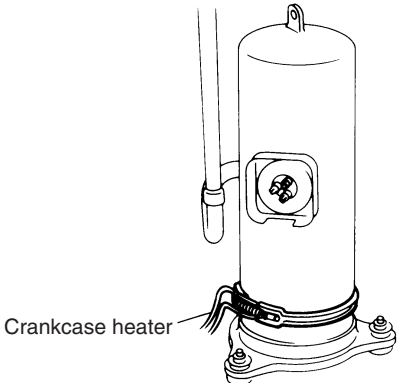
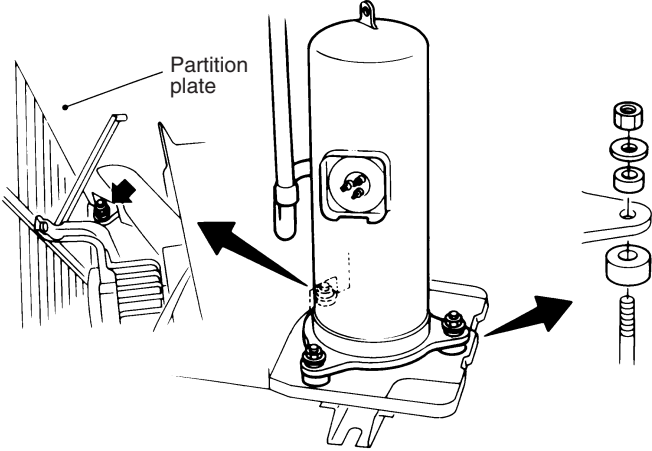
**Procedure**



**Warning**

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

Step	Procedure	Points
<p>* Remove the external casing, etc., according to its removal procedure.</p>		
<p>1 Remove the compressor sound-proofing.</p>		
<p>2 Disconnect the compressor lead wire from the compressor terminal. Remove the solenoid valve coil.</p>		
<p>3 Heat the brazed parts of the discharge and suction pipes, and remove from the piping side with a pair of pliers, etc.</p>		

Step	Procedure	Points
4	<p>Disconnect the crankcase heater's spring and remove the heater.</p> 	
5	<p>Remove the compressor's 3 washer based nuts.</p>	
6	<p>Lift the compressor slightly and draw out toward yourself.</p> 	

# Revision History

Month / Year	Version	Revised contents
06 / 2013	Si211311E	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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