




REMOVAL PROCEDURE



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

7.1 kW Class

-  Outdoor Unit
-  Non-Inverter
-  Pair Type



Service Manual Removal Procedure

Outdoor Unit

Applicable Models

- Heat Pump
RQ71LV1A

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1. Procedure to Remove Outside Panels and Related Parts

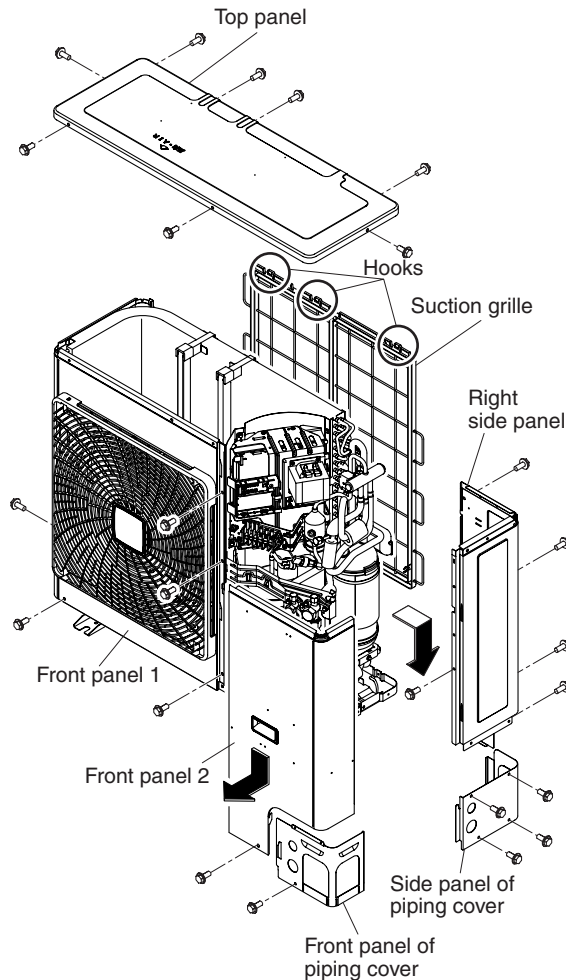
Procedure



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 front panel 2 (the front panel of the side panel), after removing the 1 screw and pushing the front panel downward.	
2	Remove the top panel, after removing the 8 screws.	
3	Remove the front panel 1, after removing the 7 screws (1 screw on rear side).	
4	Remove the right side panel, after removing the 5 screws.	
5	Remove the front panel of the piping cover, after removing the 1 screw.	
6	Remove the side panel of the piping cover, after removing the 4 screws.	
7	Hold the lower part (2 positions) and pull frontward. Remove from the top hooks using a flathead screwdriver etc. and then pull downward the whole suction grille to remove it.	



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, following the procedure indicated at "Procedure to Remove Outside Panels and Related Parts".</p>		
<p>1. Remove the propeller fan</p>		
<p>1 Remove the 4 screws that fix the discharge grille. Remove from 4 hooks at upper and lower side and then remove the discharge grille.</p> <p>2 Remove the fan setting nut that fixes the propeller fan.</p> <p>3 * Remove the top panel, following the procedure indicated at "Procedure to Remove Outside Panels and Related Parts".</p>	<p>Propeller fan</p> <p>Hooks</p> <p>Fan setting nut</p> <p>Discharge grille</p> <p>Hooks</p>	
<p>2. Remove the fan motor</p>		
<p>1 Remove the connector for the fan motor from the PCB.</p> <p>2 Remove the 3 clamps which fix the lead wire. (3 hooks of partition plate)</p> <p>3 Remove the 3 screws of the front panel and then pull lead wire forward.</p> <p>4 Pull out the fan motor, after removing the 4 fixing bolts.</p>	<p>Connector for fan motor (X106A)</p> <p>Clamp</p> <p>3 screws</p> <p>4 bolts</p>	<p>■ In case of removing the connector, do not pull the lead wire. Hold the connector part and push the hook.</p> <p>Lead wire</p> <p>Propeller fan</p> <p>■ Precaution for the motor installation Be sure to fix the lead wire of the motor. Otherwise the lead wire might be entangled with the motor and causes failure.</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, the suction grille, the top panel, the side panel, and the piping cover, following the procedure indicated at "Procedure to Remove Outside Panels and Related Parts".</p>		<p>■ Precaution for the installation of the switch box: After restoring each part, fix each lead wire with the clamps in the same way as originally fixed.</p>
<p>1. Remove the wirings to the switch box and the related parts</p>		<p>■ Precaution for the installation of the switch box: After restoring each part, fix each lead wire with the clamps in the same way as originally fixed.</p>
<p>1 Remove the connectors below;</p> <ul style="list-style-type: none"> • Fan motor (X106A) • Pressure sensor (X17A) • Coil of four way valve (X25A) • Compressor relay (X502A) <p>2 Remove the parts below;</p> <ul style="list-style-type: none"> • Coil of electronic expansion valve (Y1E) • Liquid pipe thermistor (R6T) • suction pipe thermistor (R3T) • Discharge pipe thermistor (R2T) • Outdoor air thermistor (R1T) • Heat exchanger thermistor (R4T) • Intermediate heat exchanger thermistor (R5T) <p>* When removing, cut the clamps that fix each lead wire of each part.</p>		<p>■ Precaution for the installation of the switch box: After restoring each part, fix each lead wire with the clamps in the same way as originally fixed.</p>
<p>2. Removing the switch box</p>		<p>■ Precaution for the installation of the switch box: After restoring each part, fix each lead wire with the clamps in the same way as originally fixed.</p>
<p>1 Remove 2 screws that fix the switch box.</p>		<p>■ Precaution for the installation of the switch box: After restoring each part, fix each lead wire with the clamps in the same way as originally fixed.</p>
<p>2 Holding the switch box, lift upward and remove the 2 hooks (one right and one left) and then pull out.</p>		<p>■ Precaution for the installation of the switch box: After restoring each part, fix each lead wire with the clamps in the same way as originally fixed.</p>

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.

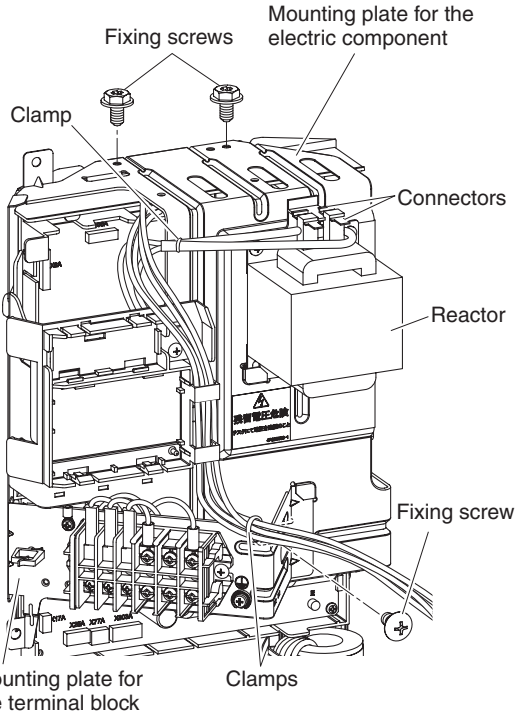
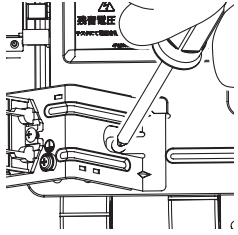
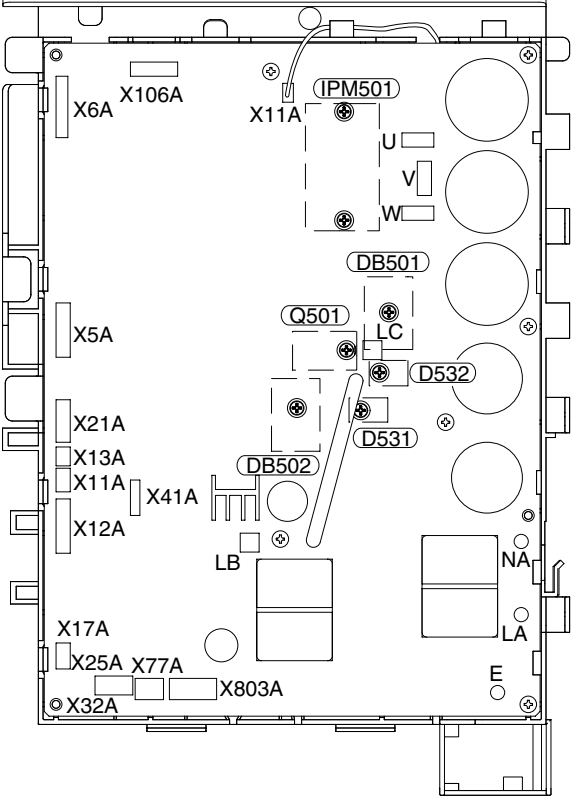
Step	Procedure	Points
<ul style="list-style-type: none"> ■ Remove the top panel, the front panel 2, the side panel, and the piping cover, following the procedure indicated at "Procedure to Remove Outside Panels and Related Parts". ■ Remove the switch box, following the procedure indicated at "Procedure to Remove switch box". 		
<p>1. Remove the display PCB (A2P)</p>		
<p>1</p> <ul style="list-style-type: none"> ■ Remove the connectors (X205A) on the display PCB. ■ Since the display PCB (A2P) is fixed with 2 hooks, take from them and then remove the display PCB. 		<ul style="list-style-type: none"> ■ Installation section of the display PCB (A2P)

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
2.	Remove the mounting plate for the electric component	
1	Remove the mounting plate for the terminal block, after removing the 1 screw.	
2	Remove the 2 connectors on the reactor.	
3	Cut 3 clamps that fix the wiring.	
4	Remove the mounting plate for the electric component after removing the 2 screws.	
		 <p>(cf)</p> 
		<p>After removing the mounted electric component</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 assy (A1P)		
1	Remove the connectors on the PCB.	
2	Remove the 1 screw that fixes the electric component to the mounting plate.	
3	Pull out the PCB assy, after removing from the hooks at the both sides (nine locations).	
	<p>PCB assy (Retrieved)</p>	

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 outside panels, their parts, and the switch box, following the procedure indicated at "Procedure to Remove Outside Panels and Related Parts" and other instructions.</p>			
<p>1. Remove the pressure sensor</p>			
<p>1 Remove the connector for the pressure sensor (X17A).</p> <p>2 Remove the pressure sensor after cutting off the brazing (1 location).</p>			<ul style="list-style-type: none"> ■ Be sure to collect the refrigerant first, before removing the main unit of the electronic expansion valve. ■ Precaution for the mounting of the coil of the electronic expansion valve.
<p>2. Remove the pressure switch</p>			
<p>1 Remove the lead wire.</p> <p>2 Remove the pressure switch after cutting off the brazing.</p>			
<p>3. Remove the electronic expansion valve</p>			
<p>1 Pull out the coil from the electronic expansion valve upward.</p> <p>2 Cut the brazing (2 locations) and remove the body of the electronic expansion valve. (Replace with the assembly of the electronic expansion valve)</p>		<p>Push the coil into tube until the clip completely fits in the tube.</p>	

8. Procedure to Remove Thermistor

Procedure



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Step	Procedure	Points
<p>■ Remove the front panel 2, the right side panel, and the piping cover, following the procedure indicated at "Procedure to Remove Outside Panels and Related Parts".</p>	<p>Thermistor</p>	<p>Thermistor</p>
<p>1 Remove the outdoor air thermistor, pulling forward and then sliding it to the right.</p>	<p>Discharge pipe thermistor (R2T)</p>	<p>Outdoor air thermistor (R1T)</p>
<p>2 Pull out the discharge pipe thermistor by picking and pulling out the mounting spring.</p>	<p>Suction pipe thermistor (R3T)</p>	<p>Intermediate heat exchanger thermistor (R5T)</p>
<p>3 Pull out the suction pipe thermistor by pushing the fixing part.</p>	<p>Liquid pipe thermistor (R6T)</p>	<p>Heat exchanger thermistor (R4T)</p>
<p>4 Since the heat exchanger thermistor is fixed with the clamp plate, pull the clamp plate forward in order to remove the thermistor.</p>	<p>■ The discharge pipe thermistor, the suction pipe thermistor, the heat exchanger distributor thermistor, and the thermistor for the midpoint of the heat exchanger are connected to the 1 common connector. When replacing, you have to replace all 4 thermistors at one time.</p>	
<p>6 Pull out the liquid pipe thermistor by pushing the fixing part.</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"> ■ Collect the refrigerant. ■ Remove the outside panels, their parts, and switch box, following the procedure indicated at "Procedure to Remove Outside Panels and Related Parts" and other instructions. 		<ul style="list-style-type: none"> ■ Be sure to confirm that the refrigerant is completely collected before starting the work. ■ Protect other pipings using a protective sheet for the welding or steel plate so that the flame for the gas welding may not damage them. ■ When brazing, cool down the main unit using a wet waste etc. so that the temperature of the main unit may not get higher than 120 degree.
<ol style="list-style-type: none"> 1 Remove the four way valve after removing the 1 screw. 2 Remove the main unit of the four way valve after cutting off the brazing (4 locations). 		

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
<ul style="list-style-type: none"> ■ Collect the refrigerant. ■ Remove the outside panels, their parts, and the switch box, following the procedure indicated at "Procedure to Remove Outside Panels and Related Parts" and other instructions. 		<ul style="list-style-type: none"> ■ Be sure to confirm that the refrigerant is completely collected before starting the work. ■ The color of each terminal <div style="text-align: center; margin-top: 10px;"> <p>U: Red V: White W: Blue</p> </div>
<p>1 Remove the fixing plate for the stop valve after removing the 5 screws.</p>		
<p>2 Remove the sound insulation (1).</p>		<ul style="list-style-type: none"> ■ One of the fixing nuts of the compressor is located at the outer side of the partition plate.
<p>3 Remove the terminal cover, after pushing the projective parts from the both sides.</p>		
<p>4 Remove the lead wire from the terminal.</p>		
<p>5 Pull out the sound insulation (2) by unwinding the strings (2 locations).</p>		
<p>6 Remove the 3 nuts that fix the compressor. (1 nut on rear side).</p>		
<p>7 Cut off the brazing (2 locations).</p>		
<p>8 Pull out the compressor by lifting upward.</p>		

Revision History

Month / Year	Version	Revised contents
09/2012	SiAU281212	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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