



Si281312E

REMOVAL PROCEDURE



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

3/4/5/6 HP Class

-  Indoor Unit
-  Inverter
-  Pair Type



Service Manual Removal Procedure

Outdoor Unit

Applicable Models

●Heat Pump

**FCQ71KVLT
FCQ100KVLT
FCQ125KVLT
FCQ140KVLT**

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1. Procedure to Remove Air Filter and Suction Grille

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. Removing the air filter</p> <p>1 Press the 2 buttons simultaneously and pull the suction grille down slowly.</p> <p>2 Pull down the bottom part of the air filter once, and then disengage the hole (2 places) for latch from the protrusion respectively.</p> <p>3 Hold up the air filter, and then disengage the hole (2 places) for latch from the protrusion located at the top end respectively.</p>		<ul style="list-style-type: none"> ■ Clean stains off the air filter with a vacuum cleaner or wash them off with water. (Do not use hot water of 50°C or more temperature for this purpose.) ■ After cleaning the air filter, press the Filter Sign Reset button on the remote controller. (The message “Clean Filter” will disappear from the remote controller display.)
<p>2. Removing the suction grille</p> <p>1 Disengage the strings (2 places) located at the top of the suction grille from the panel.</p> <p>2 Open the suction grille to an angle of 45 degrees, and then hold it up to unlatch the latches located in 3 places.</p>		<ul style="list-style-type: none"> ■ Clean stains off the suction grill using a soft brush with water or mild detergent. (Do not use hot water of 50°C or more temperature for this purpose.)
		<p>Latches located in 3 places</p> <p>Panel latches</p> <p>Suction grille</p>

2. Procedure to Remove Decoration Panel

Procedure



Warning

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Step	Procedure	Points
<ul style="list-style-type: none"> ■ Removing the suction grille according to procedure for removing the suction grille. ■ According to the procedure for the removal of PCB, remove the lid from the switch box and disconnect the relay connector for the swing motor. 		<ul style="list-style-type: none"> ■ Relay connector
<p>1. Removing the decoration panel</p>	<p>Corner cover</p>	<ul style="list-style-type: none"> ■ Corner cover string
<p>1 Pull down the corner covers on the inner side (i.e., the suction grille side) to remove them.</p>		
<p>2 Remove the corner cover strings.</p>		<ul style="list-style-type: none"> ■ Screw fixing the decoration panel
<p>3 Unfasten the 4 screws that fix the decoration panel to the extent that the panel is loosely fixed.</p>		
<p>4 Unlatch the 4 outer latches (A). (At this time, make sure the 2 inner latches (B) are latched.)</p>		
<p>5 While holding the decoration panel with both hands, unlatch the 2 inner latches (B), and then remove the decoration panel.</p>		

3. Procedure to Remove Horizontal Blade

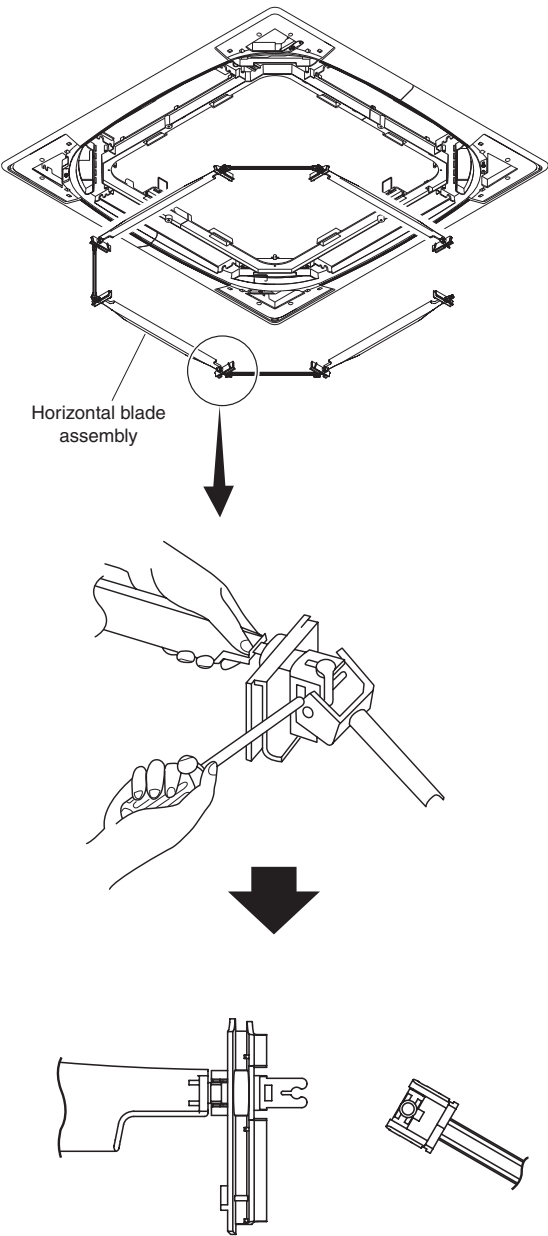
Procedure



Warning

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

Step	Procedure	Points
<p>■ Removing the decoration panel according to procedure for removing the decoration panel.</p>	<p>Screw on the back side (located in 4 places)</p> <p>Seal part (A) (located in 4 places)</p> <p>Inner frame of decoration panel</p> <p>Screw on the front side (located in 4 places)</p>	
<p>1. Remove the inner frame from the decoration panel</p>		
<p>1 Unscrew the 4 screws from the back of the decoration panel.</p>		
<p>2 Remove the 4 seal parts (A) from the back of the decoration panel.</p>		
<p>3 Unscrew the 4 screws from the front of the decoration panel.</p>		
<p>4 Pull out the inner frame straight from the decoration panel.</p>		
<p>2. Remove parts related to heat insulation</p>		
<p>1 Remove heat insulation from the 4 inner frames.</p>		
<p>2 Remove heat insulation from the 4 corners.</p>		
<p>3 Remove a total of 8 bearing mounting plates by unscrewing 1 screw, respectively.</p>	<p>Heat insulation of corner (located in 4 places)</p> <p>Bearing mounting plates (located in 8 places)</p> <p>Heat insulation of inner frame (located in 4 places)</p>	

Step	Procedure	Points
3.	Removing the horizontal blade	
1	Remove the horizontal blade assembly.	
2	<p>To remove the horizontal blade, put a screwdriver in the connection and apply the "principle of leverage".</p> 	

4. Procedure to Remove Swing 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>■ According to the procedure for the removal of decoration panel, remove the decoration panel.</p>		
<p>1 Take the anti-sweat part from the motor casing.</p>		
<p>2 Unscrew the 2 screws that fix the motor casing, and then remove the motor casing.</p>		
<p>3 Disconnect the relay harness connector from the swing motor.</p>		
<p>4 Unscrew the 2 screws that fix the swing motor, and then remove the swing motor.</p>		

5. 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>■ According to the procedure for the removal of decoration panel, remove the decoration panel.</p>		<p>■ Disconnect every connector while holding down the tab beside the connector.</p>
<p>1 Unfasten the 2 screws that fix the lid of the switch box, and then slide to remove the lid.</p> <p>2 Disconnect connectors shown below from the inside of the switch box.</p> <ul style="list-style-type: none"> • Flow switch connector (X15A, white) • Heat exchanger thermistor connector (X18A, red) • Fan motor connector (X20A, white) • Drain pump connector (X25A, white) 		
<p>3 Unscrew the 2 screws that fix the switch box, and then remove the switch box.</p>		

6. 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>■ According to the procedure for the removal of decoration panel, remove the decoration panel.</p>		
<p>1 Unfasten the 2 screws that fix the lid of the switch box, and then slide to remove the lid.</p>		
<p>2 Disconnect connectors and others from the PCB.</p>		
<p>3 Unscrew the 1 screw that fixes the ground cable (green).</p>		
<p>4 Press the 3 tabs to remove the PCB.</p>		

7. Procedure to Remove Bell Mouth and Drain Pan

Procedure



Warning

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

Step	Procedure	Points
<p>■ According to the procedure for the removal of decoration panel, remove the decoration panel.</p>		
<p>1. Removing the bell mouth</p> <p>1 Remove the 3 mounting screw on the bell mouth.</p> <p>2 Unscrew the 2 screws that fix the float switch wiring, and then pull out the wiring.</p> <p>3 Lower the front side of the bell mouth, and then slide to remove it to the front. (■Refer to the Points column.)</p>		<p>■ Removal of bell mouth</p>
<p>2. Removing the drain pan</p> <p>1 Remove the drain socket cap, and then discharge drain water.</p> <p>2 Unscrews the 4 screws that fix the drain pan.</p> <p>3 Pull out the drain pan downward.</p>		<p>■ Residual drain water on the drain pan may result in wet floor. To avoid that, completely discharge drain water or put a vinyl sheet or else on the floor, and then commence the removal of the drain pan.</p>

8. 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
<ul style="list-style-type: none"> ■ According to the procedure for the removal of switch box, remove the switch box. ■ According to the procedure for the removal of bell mouth, remove the bell mouth. 		
<p>1. Removing the fan rotor</p>	<p>1 Remove the washer-faced nut and the fan rotor lock bracket.</p> <p>2 Pull out the fan rotor downward.</p>	
<p>2. Removing the fan motor</p>	<p>1 Disconnect the connector from the fan motor.</p> <p>2 Remove the washer-faced nut, and then take out the fan motor.</p> <p>3 Remove the vibro-isolating rubber from the fan motor.</p>	

9. Procedure to Remove Drain Pump, Float Switch

Procedure



Warning

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Step	Procedure	Points
<ul style="list-style-type: none"> ■ According to the procedure for the removal of decoration panel, remove the decoration panel. ■ According to the procedure for the removal of drain pan, remove the drain pan. 		
<p>1. Removing the drain pump</p> <p>1 Cut the cable tie with nippers.</p> <p>2 Pull out the drain hose.</p> <p>3 Unscrew the 3 screws that fix the drain pump assembly, and then remove the assembly.</p> <p>4 Unscrew the 3 screws that fix the drain pump mounting bracket, and then remove the bracket.</p>		
<p>2. Removing the float switch</p> <p>1 Unscrew the 1 screw that fixes the float switch assembly, and then remove the assembly.</p> <p>2 Slide the 2 protrusions laterally, and then remove the float switch.</p>		

10.Procedure to Remove Humidity Thermistor and Air Temperature Thermistor

Procedure



Warning

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Step	Procedure	Points	
<p>■ According to the procedure for the removal of decoration panel, remove the decoration panel.</p>			
<p>1. Removing the humidity thermistor assembly</p>			
<p>1 Unfasten the 2 screws that fix the lid of the switch box, and then slide to remove the lid.</p> <p>2 Disconnect the humidity thermistor connector.</p> <p>3 Pull out the humidity thermistor assembly together with the plastic casing downward.</p>			
<p>2. Removing the humidity thermistor</p>			
<p>1 Pull out the plastic casing (2).</p> <p>2 Press the 3 tabs, and then remove the humidity thermistor.</p> <p>3 Disconnect the connector.</p>			

11.Procedure to Remove Heat Exchanger Temperature Thermistor

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"> ■ According to the procedure for the removal of decoration panel, remove the decoration panel. ■ According to the procedure for the removal of bell mouth and drain pan, remove the mouth and drain pan. 	<p style="text-align: center;">Cable tie</p> <p style="text-align: center;">Thermistor Insulation</p>	
<ol style="list-style-type: none"> 1 Cut the cable tie. 2 Pull to remove the heat exchanger thermistor together with heat insulation in the direction shown by the arrow. 		

Revision History

Month / Year	Version	Revised contents
06 / 2013	Si281312E	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.

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