

# REMOVAL PROCEDURE



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

### **1/1.25/1.6/2/2.5/3.2/4/5 HP Class**



Indoor Unit



Inverter



New Round Flow  
Cassette Type



# **Service Manual Removal Procedure**

## **Indoor Unit**

### **Applicable Models**

●Cooling Only  
BYCQ140CGW1

●Heat Pump  
BYCQ140CGW1

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# 1. Procedure to Remove Suction Grille

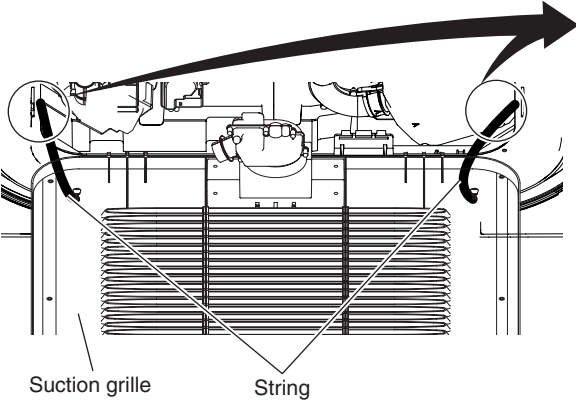
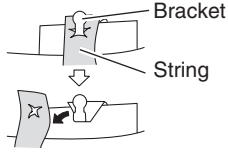
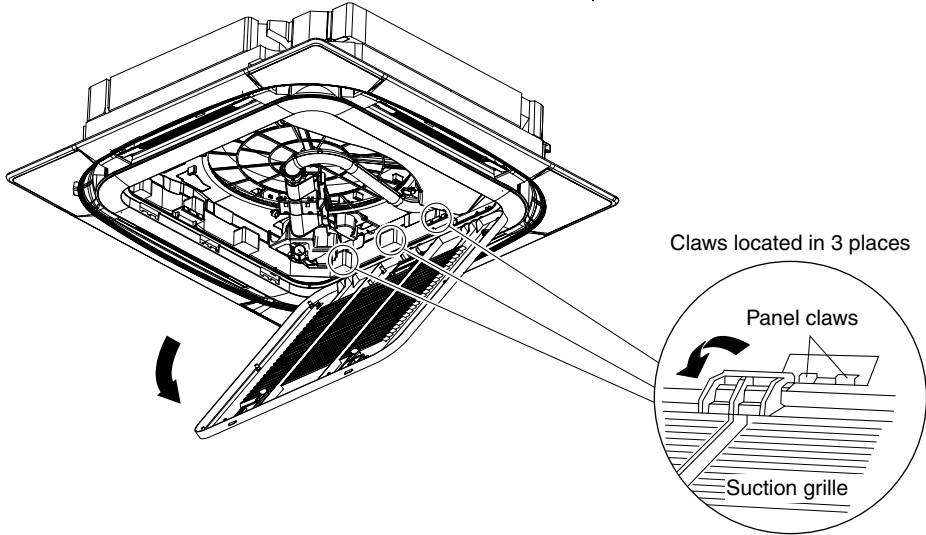
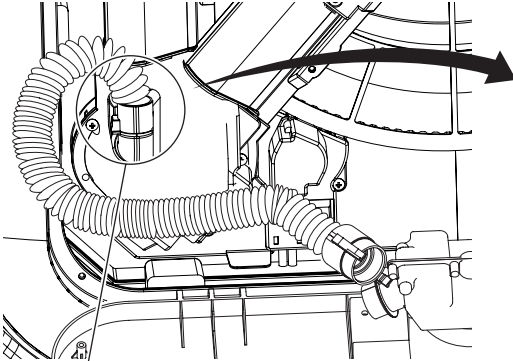
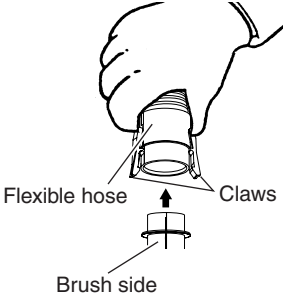
**Procedure**

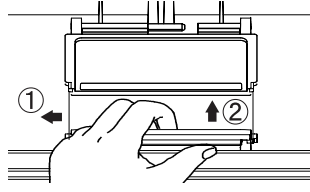
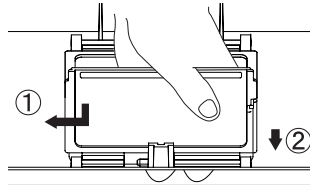
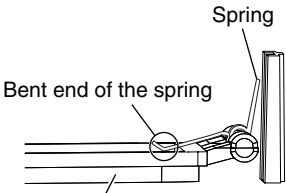


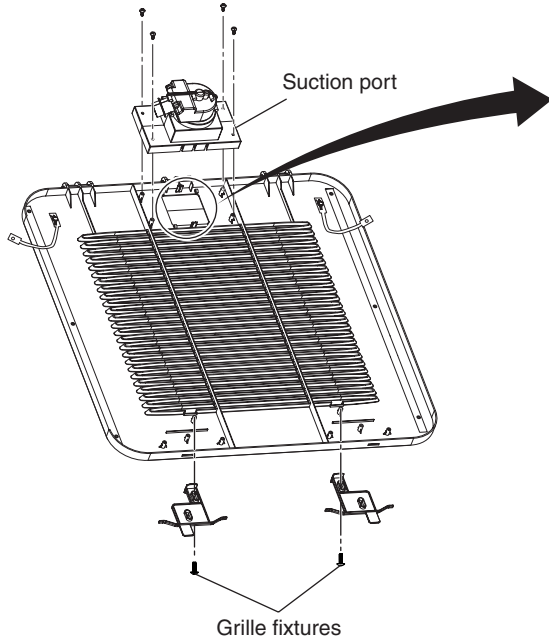
**Warning**

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

Step	Procedure	Points
1. Removing the Suction Grille.		
1 Press the 2 hooks simultaneously and pull down the suction grille slowly.		
2 Disconnect the flexible hose connection 1 by pressing the claws on the hose.		<p>■ Flexible hose connection 1</p> <p>Flexible hose Suction port</p> <p><b>&lt;Precautions when installing&gt;</b> Check that the claws are secured in place. Be careful not to collapse the flexible hose when inserting it into the panel.</p>

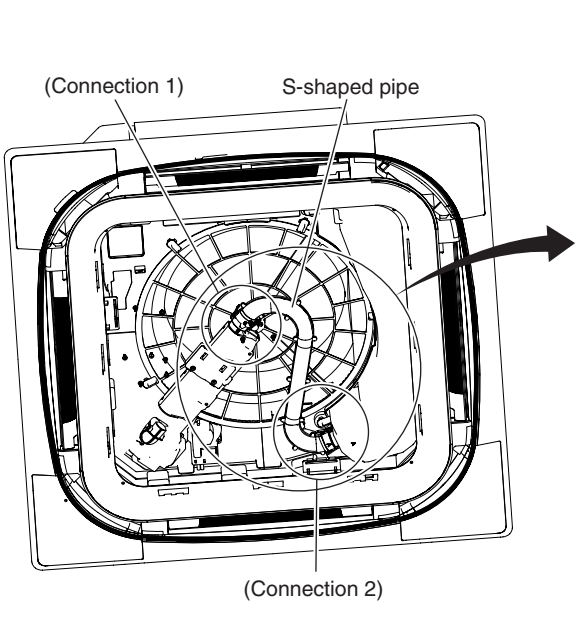
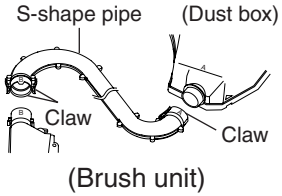
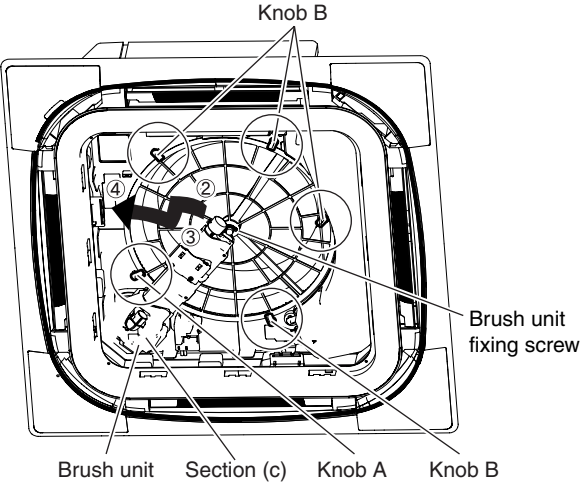
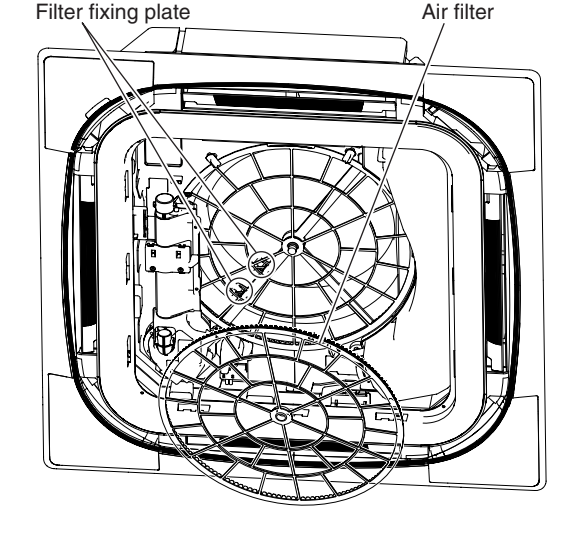
Step	Procedure	Procedure	Points
3	Disengage the 2 strings located at the top of the suction grille from the panel.		<p>■ Latching section</p>  <p>&lt;Precautions when installing&gt; The bracket should not be protruded. Otherwise it may contact the flexible hose and damage the hose.</p>
4	Open the suction grille to an angle of 45°, and then hold it up to unlatch the claws located in 3 places.		<p>■ When cleaning the suction grille, wash it with water or water with mild detergent using the brush. (Never use hot water over 50°C.)</p> <p>&lt;Precautions when installing&gt; The suction grille may be broken if attempted to latch on the wrong side.</p>
5	Disconnect the flexible hose connection 2 by pressing the claws on the hose.		<p>■ Flexible hose connection 2</p> 

Step	Procedure	Points
2.	Removing the Parts on the Suction Grille.	
1	Remove the 4 screws of the suction port.	
2	Remove the suction port cover.	<p><b>&lt;How to remove the suction port cover&gt;</b>                      As shown below, detach the right end projection using your thumb while pressing the cover leftward.</p> 
3	Remove the 2 screws (1 each) of the grille fixtures.	<p><b>&lt;How to install the suction port cover&gt;</b>                      As shown below, attach the right end projection using your thumb while pressing the cover leftward.</p>  <p><b>Installation detail</b></p>  <p>Mind the direction of the spring!</p>



## 2. Procedure to Remove Air Filter

**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 suction grille according to the procedure to remove the suction grille.</p>		<p><b>&lt;Installation detail&gt;</b></p>  <p><b>&lt;Precautions when installing&gt;</b> Check that the claws are secured in place.</p>
<p>1. Removing the S-shaped Pipe.</p> <p>1 Pull to disconnect the S-shaped pipe connection 1 while pressing the claws.</p> <p>2 Pull to disconnect the S-shaped pipe connection 2 while pressing the claws.</p>		<p><b>&lt;Precautions when installing&gt;</b> Be sure to press the (c) section of the brush unit upward (toward the filter) when turning its top end.</p> <p><b>&lt;Precautions when removing and installing the air filter&gt;</b> Be careful not to damage the filter by the filter fixing plate.</p> <p>To clean the air filter, wash it with water.</p>
<p>2. Removing the Air Filter.</p> <p>1 Turn the knob A near the brush unit to unlock.</p> <p>2 Loosen the brush unit fixing screw in the center. While pressing the (c) section of the brush unit upward (toward the filter), turn the top end of the brush unit in the arrowed direction until it stops.</p> <p>3 Pull down the brush unit lightly (toward opposite of the filter). (Approx. 20mm of clearance will be produced between the air filter and the brush unit.)</p> <p>4 Turn the brush unit further in the arrowed direction.</p> <p>5 Remove the remaining hook B fixing the air filter (4 locations).</p> <p>6 Remove the air filter.</p>	 	

### 3. Procedure to Remove Dust 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>■ Removing the suction grille according to the procedure to remove the suction grille.</li> <li>■ Removing the S-shaped pipe according to the procedure to remove the air filter.</li> </ul>		
<p>1. Removing the Dust Box.</p> <p>1 Turn the knobs 1 and 2 fixing the dust box to unlock.</p> <p>2 Take out the dust box downward (toward opposite of the filter) while inclining the inner side downward.</p> <p>3 Detach the string.</p>		<p>Knob 1</p> <p>Knob 2</p> <p><b>&lt;Precautions when removing and installing the dust box&gt;</b> Be careful not to drop the dust box.</p>
<p>2. Removing the Filter.</p> <p>1 Reverse the dust box before taking out the filter.</p>		<p><b>&lt;Precautions when installing&gt;</b></p> <ul style="list-style-type: none"> <li>■ Be careful not to let the string caught in the dust box exhaust port.</li> </ul>



# 4. Procedure to Remove El. Compo. 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 suction grille according to the procedure to remove the suction grille.</p>		
<p>1. Removing the Panel Side El. Compo. Box.</p>	<p>1 Remove the 2 screws of the el. compo. box (cover).</p> <p>2 Remove the 2 screws (1 each) of the wiring fixing plates.</p> <p>3 Disconnect all the connectors on the PCB.</p> <p>4 Remove the 2 screws of the el. compo. box.</p>	
<p>2. Removing the Unit Side El. Compo. Box.</p>		
<p>■ Removing the air filter according to the procedure for its removing the air filter.</p> <p>■ Removing the dust box according to the procedure for removing the dust box.</p>		
<p>1 Remove the 5 screws of the service cover.</p>		
<p>2 Loosen the 2 screws of the el. compo. box (cover) and slide to remove it.</p>		
<p>3 Disconnect all the connectors on the PCB.</p>		
<p>4 Remove the 2 screws of the el. compo. box.</p>		

# 5. 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>■ Removing the suction grille according to the procedure to remove the suction grille.</p>		
<p>1. Removing the Panel Side PCB.</p>		
<p>1 Remove the 2 screws of the el. compo. box (cover).</p> <p>2 Remove the 2 screws (1 each) of the wiring fixing plates.</p> <p>3 Disconnect all the connectors on the PCB.</p> <p>4 Remove the 2 screws of the PCB (with resin case) and take it out.</p>		
<p>2. Removing the Unit Side PCB.</p>		<p>■ Section view of installed PCB</p>
<p>■ Removing the air filter according to the procedure for removing the air filter.</p> <p>■ Removing the dust box according to the procedure for removing the dust box.</p>		
<p>1 Loosen the 2 screws of the el. compo. box (cover) and slide to remove it.</p> <p>2 Disconnect all the connectors on the PCB.</p> <p>3 Disengage the 3 claws of the PCB to remove it.</p>		

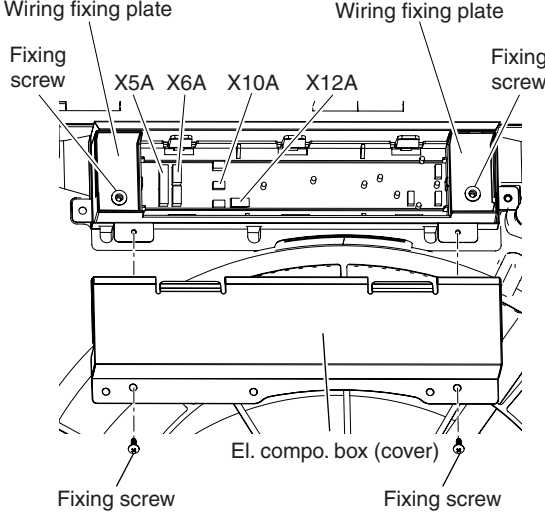
## 6. Procedure to Remove Brush Unit

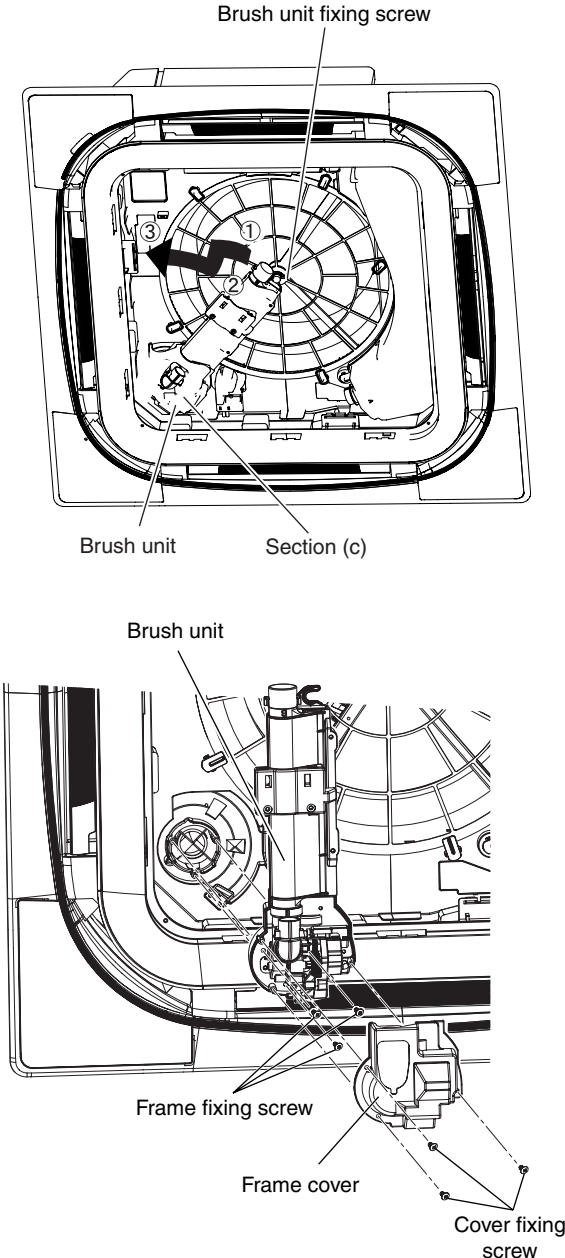
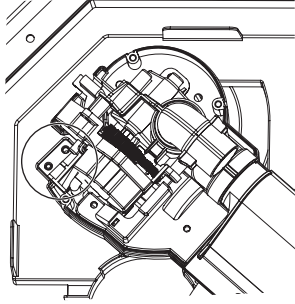
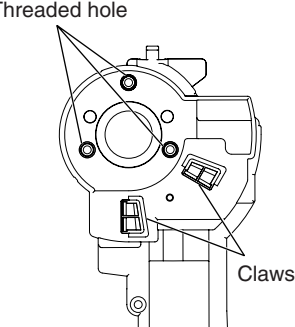
### Procedure



### 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>■ Removing the suction grille according to the procedure to remove the suction grille.</li> <li>■ Removing the S-shaped pipe according to the procedure to remove the air filter.</li> </ul>		
<p>1. Removing the Brush Unit Connection Wiring.</p>		
<p>1 Remove the 2 screws of the el. compo. box (cover).</p>		
<p>2 Remove the 2 screws (1 each) of the wiring fixing plates.</p>		
<p>3 Disconnect the following connectors on the PCB.</p> <ul style="list-style-type: none"> <li>• X5A: Connector for brush drive motor</li> <li>• X6A: Connector for damper drive motor</li> <li>• X10A: Connector for damper limit switch</li> <li>• X12A: Connector for dust detection sensor</li> </ul>	 <p>The diagram illustrates the removal of the brush unit connection wiring. It consists of two views: a top view and a bottom view. The top view shows the wiring fixing plates and screws. The bottom view shows the electrical component box cover and its screws. Labels include: Wiring fixing plate, Fixing screw, X5A, X6A, X10A, X12A, and El. compo. box (cover).</p>	

Step	Procedure	Points
<p>2. Removing the Brush Unit.</p> <p>1 Loosen the brush unit fixing screw in the center. While pressing the (c) section of the brush unit upward (toward the filter), turn the top end of the brush unit in the arrowed direction until it stops.</p> <p>2 Pull down the brush unit lightly (toward opposite of the filter). (Approx. 20mm of clearance will be produced between the air filter and the brush unit.)</p> <p>3 Turn the brush unit further in the arrowed direction.</p> <p>4 Remove the 3 screws of the frame cover.</p> <p>5 Remove the 3 screws of the brush unit. Loosen the brush unit fixing screw in the center of the brush unit and remove the frame while sliding its top end.</p>	 <p>The diagram illustrates the removal process in five steps. Step 1 shows the brush unit being rotated counter-clockwise while section (c) is pushed up. Step 2 shows the brush unit being pulled down. Step 3 shows the brush unit rotated further. Step 4 shows the frame cover being removed. Step 5 shows the brush unit being detached from the frame.</p>	<p><b>&lt;Precautions when installing&gt;</b>                  Be sure to press the (c) section of the brush unit upward (toward the filter) when turning its top end.</p> <p><b>&lt;Tips on removal&gt;</b></p>  <p>As shown above, turn the brush unit until the claw is disengaged and then pull downward.</p> <p><b>&lt;Precautions when installing the brush unit&gt;</b></p>  <p>Align the threaded holes with the panel and insert the claws in the holes on the panel.</p>

# 7. Procedure to Remove Damper Drive 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>■ Removing the brush unit according to the procedure to remove the brush unit.</p>		
<p>1. Removing the Damper Unit.</p>		
<p>1 Cut the clamp for the lead wire at 1 point.</p> <p>2 Remove the 2 fixing screws of the damper unit.</p>		<p><b>&lt;Tips on removal&gt;</b></p> <p>Bypass port side</p> <p>Hold the damper unit like the way shown above. First remove the unit on its bypass port side and lift the unit using your thumb.</p>
<p>2. Removing the Damper Drive Motor and Gear.</p>		
<p>1 Remove the 2 screws of the damper drive motor.</p> <p>2 Pull out the gear from the motor shaft.</p>		
	<p><b>&lt;Precautions when installing the damper drive motor&gt;</b></p>	<p>■ Install the damper drive motor with the damper positioned as shown in the left.</p>

# 8. Procedure to Remove Bearing (for Brush)

**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 brush unit according to the procedure to remove the brush unit.</p>			
<p>1. Removing the Bearing.</p>		<p>1 Remove the 2 screws of the bearing.</p>	
<p>1</p>			

# 9. Procedure to Remove Brush Unit, Brush Drive Motor and Dust Detection Sensor

**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>■ Removing the brush unit according to the procedure to remove the brush unit.</li> <li>■ Removing the bearing (for brush) according to the procedure to remove the bearing.</li> </ul>		
<p>1. Removing the Brush Unit.</p>	<p>1 Remove the 4 screws of the brush unit.</p>	
<p>2. Removing the Brush Drive Motor Assy.</p>	<p>1 Take out the brush drive motor assy from the frame.</p>	
<p>3. Removing the Brush Drive Motor and Gear.</p>	<p>1 Pull out the gear from the motor shaft.</p> <p>2 Remove the 2 screws of the brush drive motor.</p>	
<p>4. Removing the Dust Detection Sensor.</p>	<p>1 Remove the 2 screws of the dust detection sensor.</p>	<p>&lt;Precautions when installing the dust detection sensor&gt;</p> <p>Mind the wiring layout.</p>

# 10.Procedure to Remove Filter Drive 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>■ Removing the air filter according to the procedure to remove the air filter.</p>			
<p>1. Removing the Filter Drive Motor Assy.</p>			
<p>1 Remove the 2 screws of the filter drive motor assy.</p>			
<p>2 Pull out the gear (for air filter) from the motor shaft.</p>			
<p>3 Remove the wire harness by cutting the clamp at 1 point.</p>			
<p>4 Remove the 1 screw of the limit switch.</p>			
<p>5 Remove the 2 screws of the filter drive motor.</p>			



# 11.Procedure to Remove Decoration Panel

**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>■ Removing the suction grille according to the procedure to remove the suction grille.</li> <li>■ Removing the el. compo. box lid and the relay connector for swing motor according to the procedure to remove the PCB.</li> </ul>	<p>Corner decoration cover A</p>	<ul style="list-style-type: none"> <li>■ Relay connector</li> </ul> <p>Relay connector</p>
<p>1. Removing the Decoration Panel.</p>	<p>Corner decoration cover B</p>	<ul style="list-style-type: none"> <li>■ Corner decoration cover string</li> </ul> <p>String</p> <p>Corner decoration cover</p>
<p>1 Remove the corner decoration covers A and B by pulling their inner side (suction grille side) downward.</p>	<p>Fixing screw</p> <p>Fixing screw</p>	<ul style="list-style-type: none"> <li>■ Corner decoration cover B</li> </ul> <p>Corner decoration cover B</p>
<p>2 Remove the corner decoration cover string.</p>	<p>Outer latch (A) (4 places)</p> <p>Inner latch (B) (2 places)</p> <p>Hook</p> <p>Hook</p>	<ul style="list-style-type: none"> <li>■ Decoration panel fixing screw</li> </ul> <p>Latch</p> <p>Hook</p> <p>Fixing screw</p>
<p>3 Loosen the 4 fixing screws of the corner decoration cover (until the cover is loosely fixed).</p>	<p>Outer latch (A) (4 places)</p> <p>Inner latch (B) (2 places)</p> <p>Hook</p> <p>Hook</p>	<p>Latch</p> <p>Hook</p> <p>Fixing screw</p>
<p>4 Remove the 4 outer latches (A). (Check that the 2 inner latches (B) are still latched.)</p> <p>5 Holding the decoration panel with both hands, remove the 2 inner latches (B) and take out the decoration panel.</p>	<p>Outer latch (A) (4 places)</p> <p>Inner latch (B) (2 places)</p> <p>Hook</p> <p>Hook</p>	<ul style="list-style-type: none"> <li>■ Relay connector</li> </ul> <p>Relay connector</p>
	<p>Outer latch (A) (4 places)</p> <p>Inner latch (B) (2 places)</p> <p>Hook</p> <p>Hook</p>	<ul style="list-style-type: none"> <li>■ Relay connector</li> </ul> <p>Relay connector</p>

# 12.Procedure to Remove Horizontal Blade

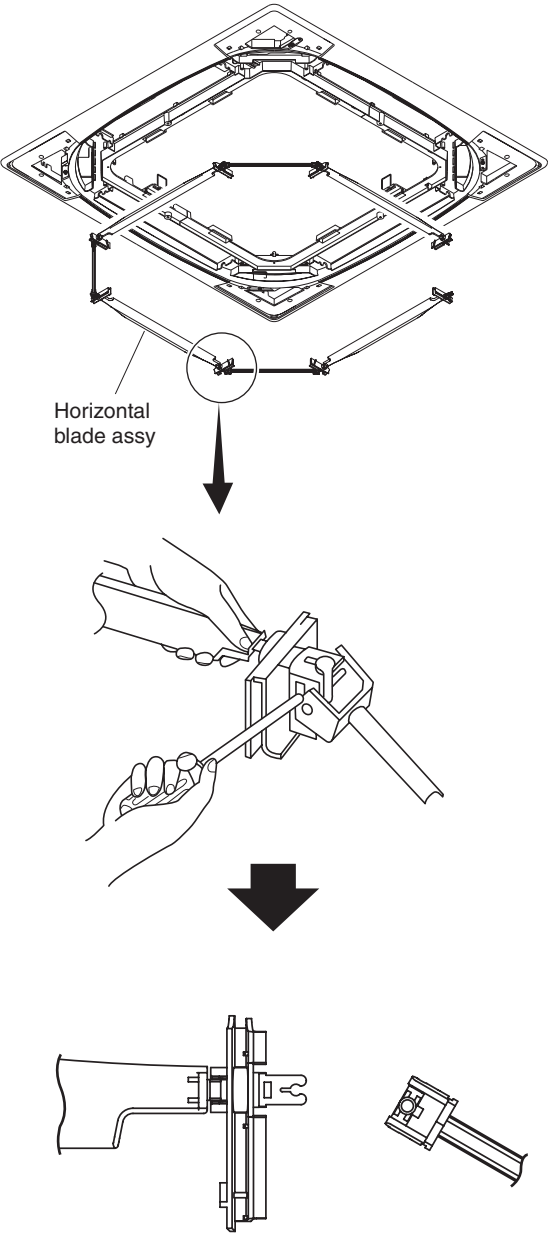
**Procedure**



**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 the procedure to remove the decoration panel.</p>			
<p>1. Removing the Inner Frame from the Decoration Panel.</p>			
<p>1 Remove the 4 screws from the back of the decoration panel.</p>			
<p>2 Remove the seal materials (A) from the back of the decoration panel (4 places).</p>			
<p>3 Remove 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. Removing the Heat Insulation Materials.</p>			
<p>1 Remove the inner frame heat insulation materials (4 places).</p>			
<p>2 Remove the corner heat insulation materials (4 places).</p>			
<p>3 Remove the screw (1 each) of the bearing mounting plates (8 places).</p>			

Step	Procedure	Points
3. Removing the Horizontal Blade.	<p data-bbox="199 280 464 347">1 Remove the horizontal blade assy.</p> <p data-bbox="199 392 464 582">2 To remove the horizontal blade, put a screwdriver into the connection and apply the "principle of leverage".</p> 	

# 13.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>■ Removing the decoration panel according to the procedure to remove the decoration panel.</p>		
<p>1 Peel off the condensation proof material from the motor cover.</p>		
<p>2 Remove the 2 screws on the motor cover.</p>		
<p>3 Remove the relay harness connector from the swing motor.</p>		
<p>4 Remove the 2 screws of the swing motor.</p>		

# Revision History

Month / Year	Version	Revised contents
01/2013	Si201301	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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