




# REMOVAL PROCEDURE



SERVICE  
MANUAL

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

## 4.2/5.0/6.0/7.1/8.0/9.0 kW Class 15000 Btu/h Class

-  Indoor Unit
-  Inverter / Hybrid /  
Non-Inverter
-  Wall Mounted Type



# Service Manual

# Removal Procedure

## Indoor Unit

### ●Cooling Only

FT15HV2S

FT50GV1G  
FT60GV1G

FTKE15GV2S

FTKE42GV1

FTKS50FVLT  
FTKS60FVLT  
FTKS71FVLT

FTKS50FVM  
FTKS60FVM  
FTKS71FVM

FTKS50FVMA  
FTKS60FVMA  
FTKS71FVMA

FTKS50GVMA  
FTKS60GVMA  
FTKS71GVMA

FTKS50GVMG  
FTKS60GVMG

### ●Heat Pump

FTXS50FVLT  
FTXS60FVLT  
FTXS71FVLT

FTXS50FVMA  
FTXS60FVMA  
FTXS71FVMA  
FTXS80FVMA  
FTXS90FVMA

FTXS50GVMA  
FTXS60GVMA  
FTXS71GVMA  
FTXS80GVMA

FTYN50GV1A  
FTYN60GV1A  
FTYN71GV1A

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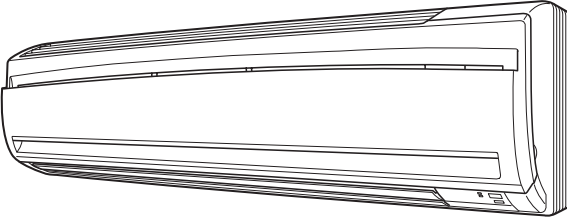
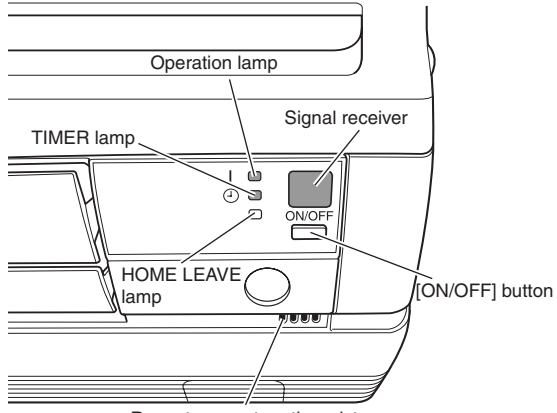
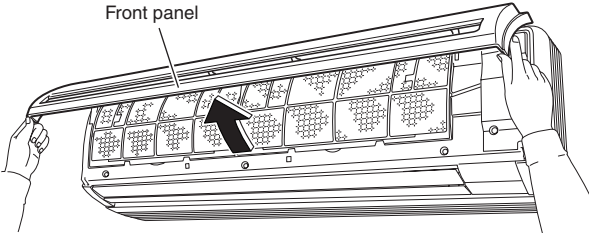
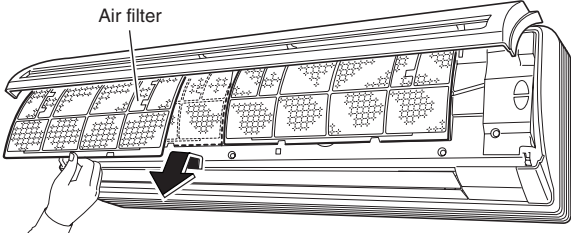
**Note:** ♦ The illustrations may be slightly different depending on the model.

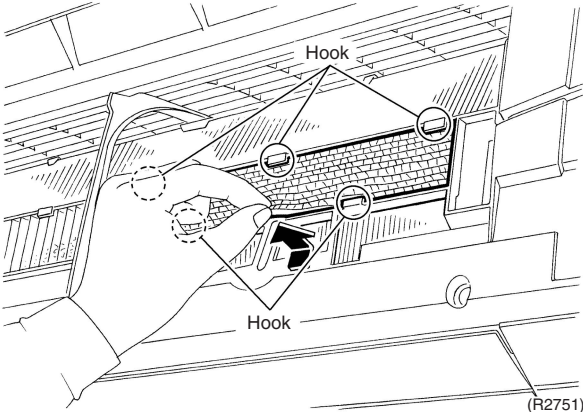
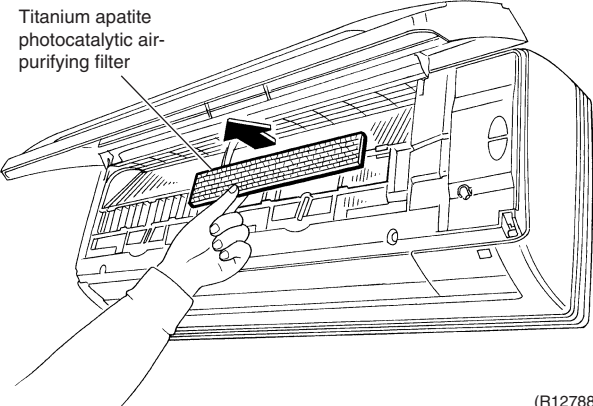
# 1. Removal of Air Filters / Front Panel

**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. Appearance features</p>	 <p>(R12786)</p>  <p>(R17229)</p>	<p><b>Warning</b>  <b>Dangerous: High voltage</b>  A high voltage is applied to all the electric circuits of this product including thermistors.</p> <ul style="list-style-type: none"> <li>■ When the signal receiver catches a signal from the remote controller, the receiving tone sounds and the operation lamp blinks immediately to confirm the signal reception.</li> <li>■ When the [ON/OFF] button is kept pressed for 5 seconds, the forced cooling operation is performed for about 15 minutes.</li> <li>■ Some models have no HOME LEAVE lamp.</li> </ul>
<p>2. Remove the air filters.</p> <p>1 Open the front panel to the position where it stops.</p> <p>2 Slightly push up the center knob of the air filter and unfasten the hooks.</p> <p>3 Pull out the air filter downward and remove it.</p>	 <p>(R6701)</p>  <p>(R6702)</p>	<ul style="list-style-type: none"> <li>■ The air filter is not marked for difference between the right and left sides.</li> <li>■ Insert the air filter with the "FRONT" mark faced up.</li> <li>■ The air filter can be set easily by inserting it along the guides.</li> <li>■ Be sure to insert the hooks (at 2 lower positions) when mounting the air filter.</li> </ul>

Step	Procedure	Points
3. Remove the Titanium apatite photocatalytic air-purifying filters.	<p data-bbox="153 315 448 539">1 Push up the bottom of the Titanium apatite photocatalytic air-purifying filter to unfasten the hooks (2 on lower, 3 on upper) and take the filter out.</p>  <p data-bbox="544 808 692 875">Titanium apatite photocatalytic air-purifying filter</p> 	<ul style="list-style-type: none"> <li>■ The right and left filters are interchangeable.</li> <li>■ Some models have no Titanium apatite photocatalytic air-purifying filter.</li> <li>■ Some models have Air-purifying filters with photocatalytic deodorizing function instead.</li> <li>■ Some models have air filters only.</li> </ul>

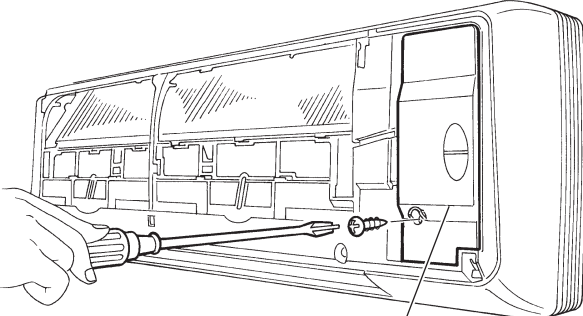
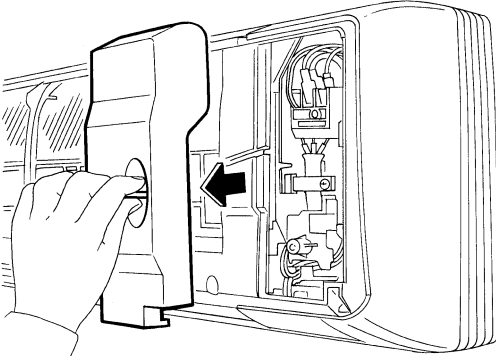
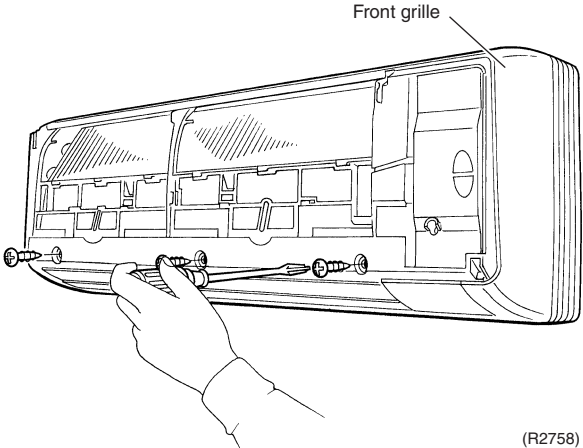
Step	Procedure	Points
4. Remove the front panel.	<p>1 While opening the front panel further than it stops, release both the shafts and remove the front panel.</p>	<ul style="list-style-type: none"> <li>■ Slide the front panel from side to side to release each shaft.</li> <li>■ When reassembling the front panel, fit the right and left rotary shafts one by one into the grooves and fully push them into position.</li> </ul>

## 2. Removal of Front Grille

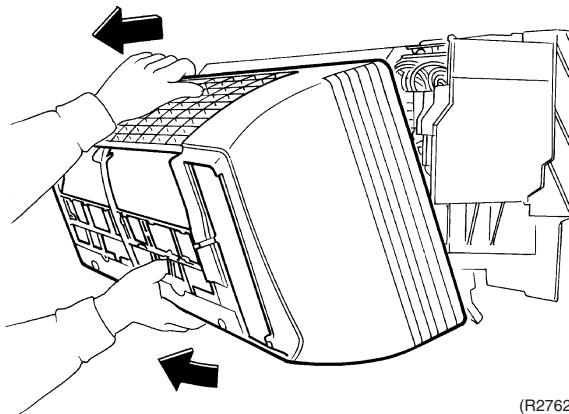
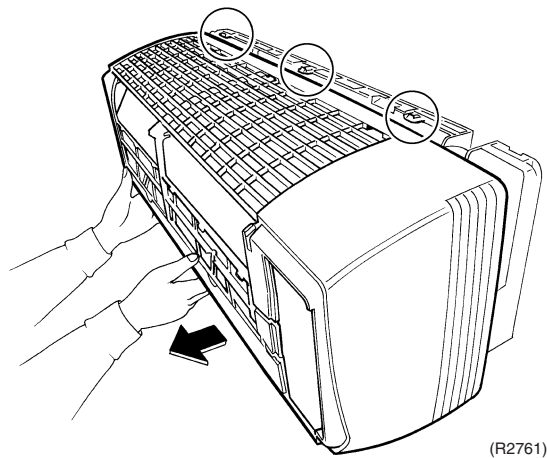
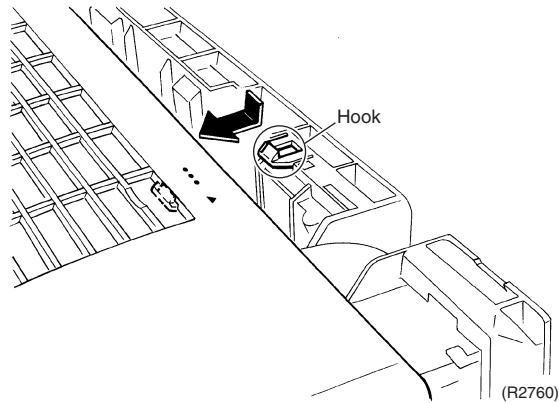
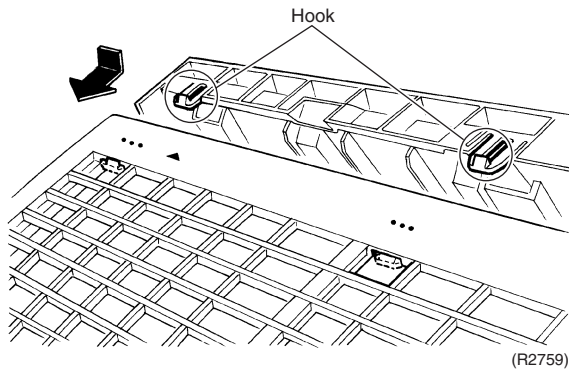
### Procedure



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

Step	Procedure	Points
<p>1. Remove the service cover.</p> <p>1 Remove the screw and remove the service cover.</p>	 <p>Service cover (R2756)</p>  <p>(R2757)</p>	<p><b>Preparation</b></p> <ul style="list-style-type: none"> <li>■ Remove the front panel according to "Removal of the Air Filters / Front Panel".</li> <li>■ You can remove the front grille without detaching the service cover.</li> </ul>
<p>2. Remove the front grille.</p> <p>1 Remove the 3 screws of the front grille.</p>	 <p>Front grille (R2758)</p>	<ul style="list-style-type: none"> <li>■ Refer to the removal procedure in a reverse way when reassembling.</li> </ul>

Step	Procedure	Points
2	<p>Unfasten the 3 hooks on the top of the front grille.</p>	<ul style="list-style-type: none"> <li>■ The convex marks (...) on the front panel indicate the position of the hooks.</li> </ul>
3	<p>Pull the upper part of the front grille out and lift the lower part up, and then remove the front grille.</p>	<ul style="list-style-type: none"> <li>■ Make sure that all the 3 hooks are engaged securely when reassembling.</li> </ul>





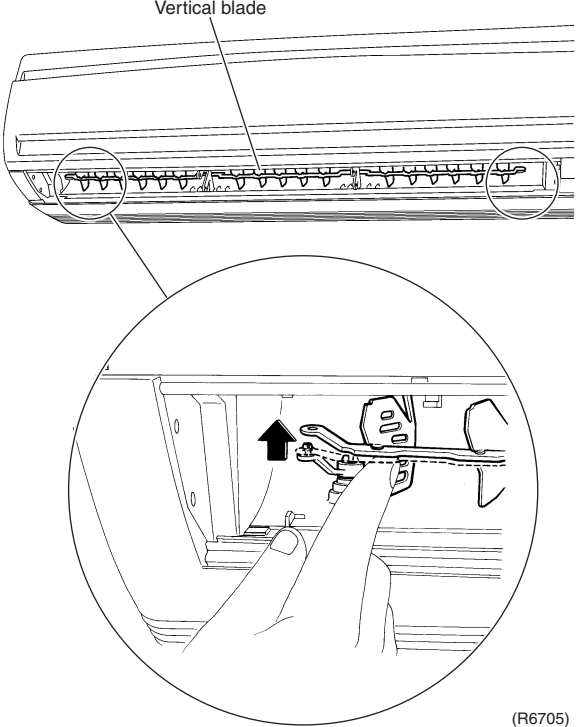
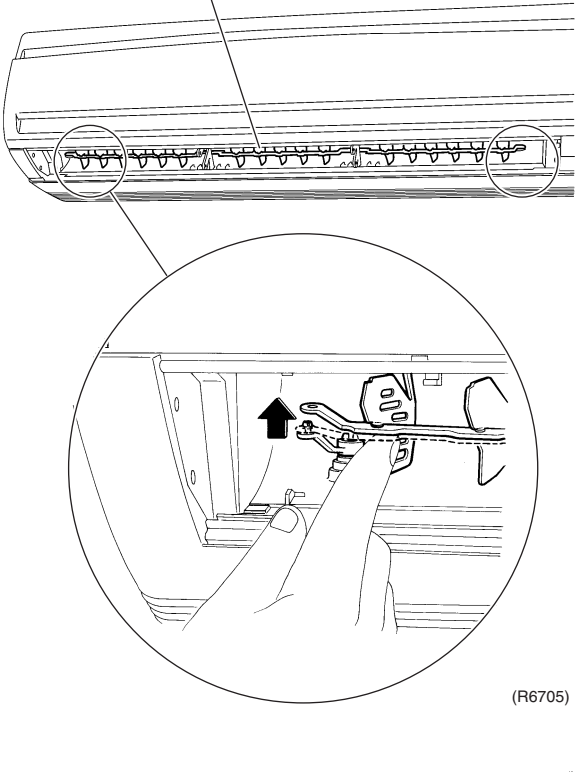
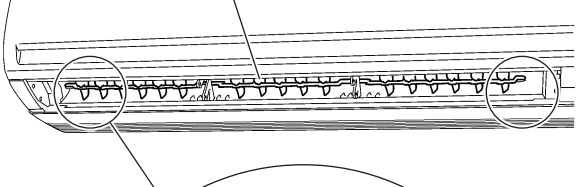
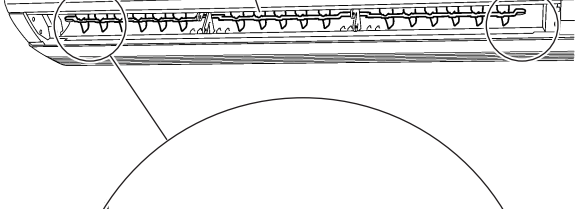
### 3. Removal of Horizontal Blades / Vertical Blades

**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 horizontal blades.	<p>Horizontal blade</p> <p>(R6703)</p>	<ul style="list-style-type: none"> <li>■ Remove both the horizontal blades (upper and lower) in the same way.</li> </ul>
1 Open the horizontal blades.	<p>Center shaft</p> <p>(R2765)</p>	
2 Bend the horizontal blade slightly and release the center shaft. (2 locations)	<p>Left shaft</p> <p>Center shaft</p> <p>(R12894)</p>	
3 Release the left shaft.	<p>Right shaft</p> <p>(R2766)</p>	<ul style="list-style-type: none"> <li>■ Installation procedure</li> <li>1. Since the key pattern hook is provided, rotate the blade and fit it to the right shaft first.</li> <li>2. Fit the blade to the center and left shafts.</li> </ul>
4 Slide the horizontal blade to the left and release the right shaft.		

Step	Procedure	Points
2. Remove the vertical blades.	 <p style="text-align: center;">Vertical blade</p> <p style="text-align: right;">(R6705)</p>	<ul style="list-style-type: none"> <li>■ The unit has 3 sets of vertical blades linked to one another with interlock rods.</li> </ul>
1. Release the right and left shafts.	 <p style="text-align: center;">Hook</p> <p style="text-align: right;">(R2768)</p>	
2. Unfasten the 3 hooks for each set of vertical blades.	 <p style="text-align: center;">Hook</p> <p style="text-align: right;">(R2768)</p>	
3. Pull the vertical blades rightward and remove them.	 <p style="text-align: right;">(R6706)</p>	

## 4. Removal of Electrical Box / PCBs / Swing Motors

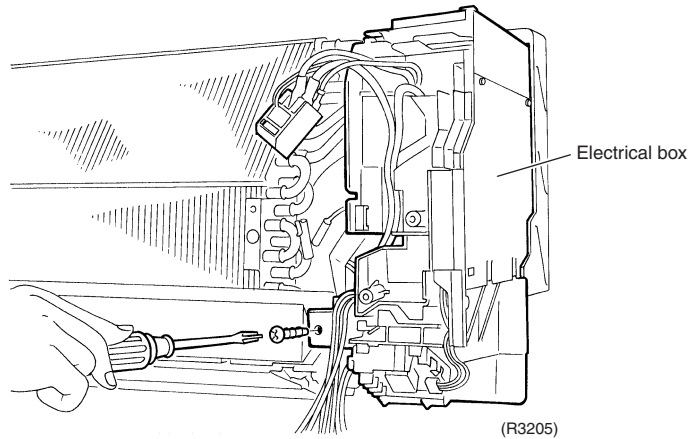
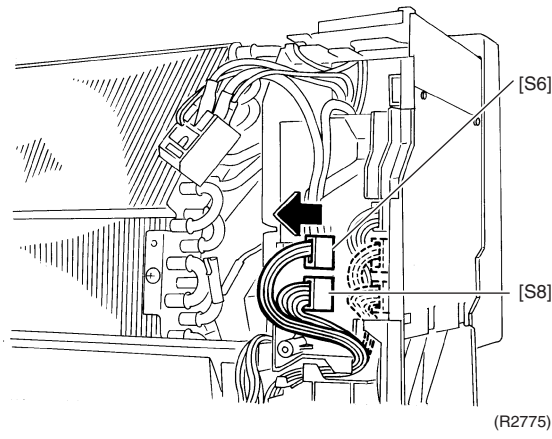
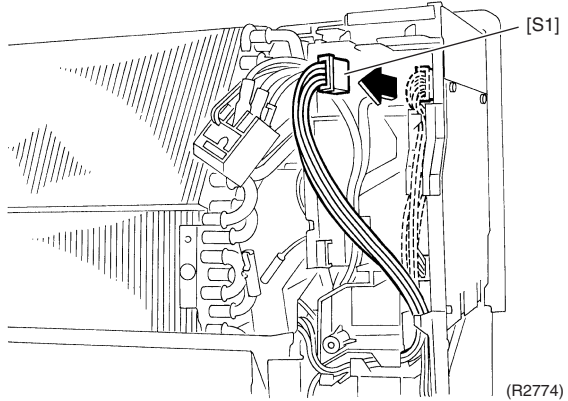
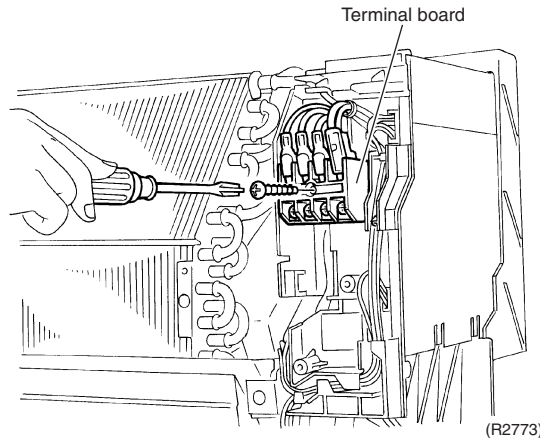
### Procedure

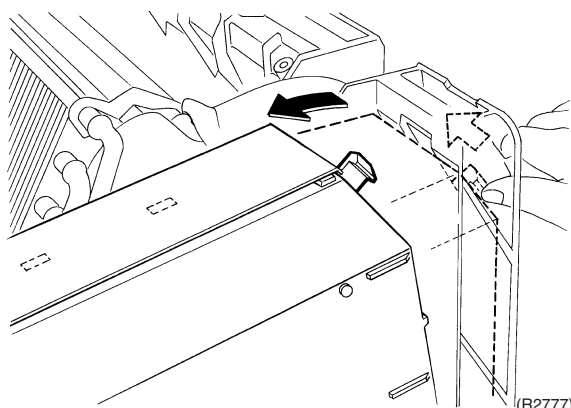
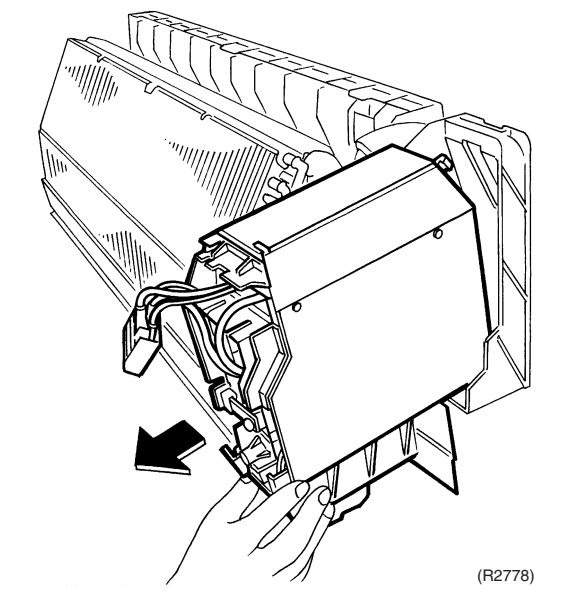
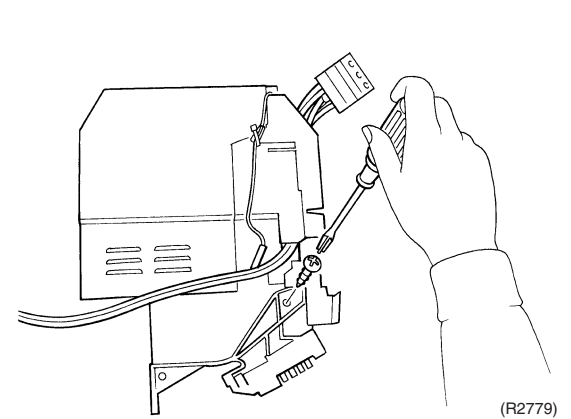
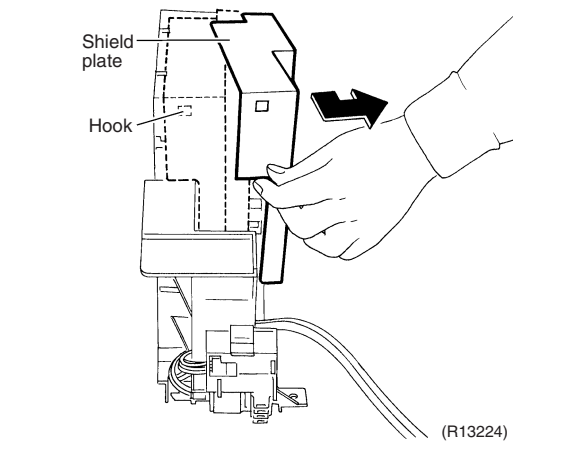


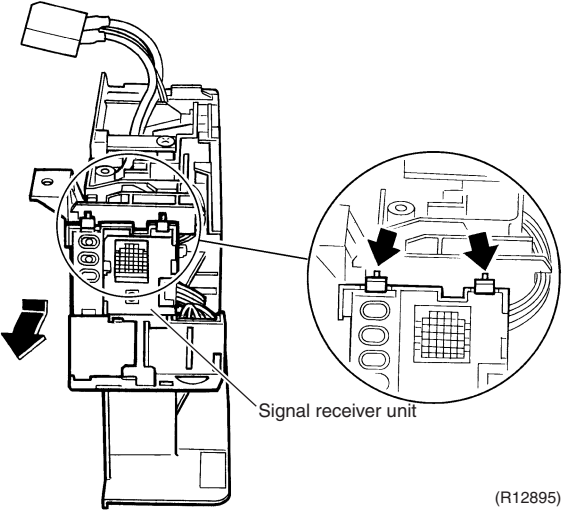
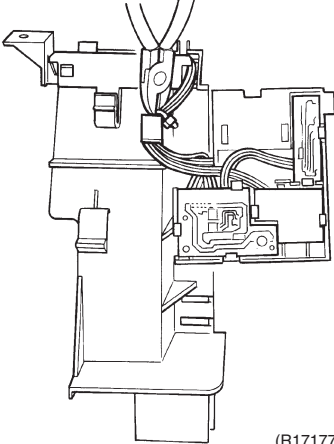
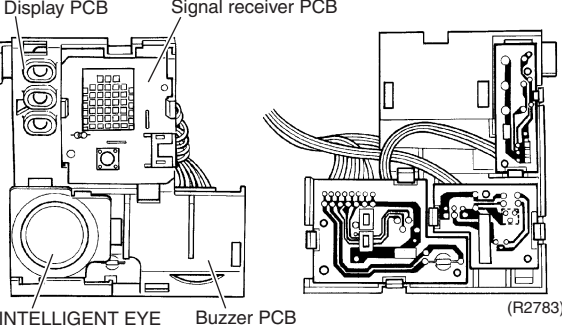
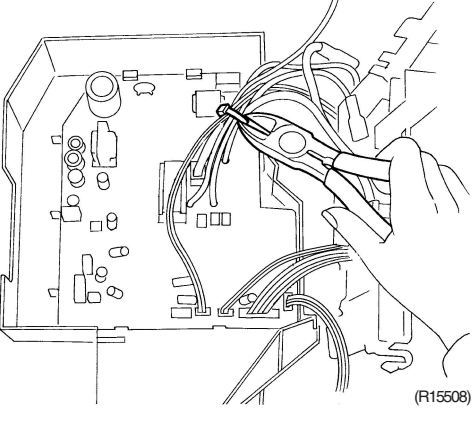
**Warning** Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1. Remove the electrical box.	<p>(R2770)</p>	<p><b>Preparation</b></p> <ul style="list-style-type: none"> <li>Remove the front grille according to the "Removal of Front Grille".</li> </ul>
1 Remove the screw and remove the drip proof plate.	<p>Drip proof plate</p> <p>(R2771)</p>	<ul style="list-style-type: none"> <li>The locations of the clamp and the indoor heat exchanger thermistor are different depending on the model.</li> </ul>
2 Cut the clamp.	<p>(R6707)</p>	<ul style="list-style-type: none"> <li>Be careful not to lose the clip for the thermistor.</li> </ul>
3 Pull out the indoor heat exchanger thermistor.	<p>Indoor heat exchanger thermistor</p> <p>Connection wire</p> <p>Wire fixture</p> <p>Earth wire</p> <p>(R17175)</p>	<p>Clip</p> <p>(R11234)</p>
4 Remove the screw of the earth wire.		
5 Remove the screws of the connection wires.		

Step	Procedure	Points
6	Remove the screw and remove the terminal board.	<ul style="list-style-type: none"> <li>■ You can remove the electrical box without detaching the terminal board.</li> <li>■ Screw: M4 × 30</li> </ul>
7	Disconnect the connector for the fan motor [S1].	
8	Disconnect the connectors for the swing motor [S6] [S8].	<p>[S6]: for horizontal blade [S8]: for vertical blade</p> <ul style="list-style-type: none"> <li>■ Some models have no harness for [S8].</li> </ul>
9	Remove the screw of the electrical box.	

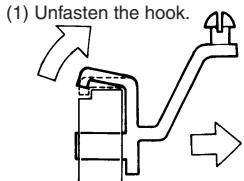
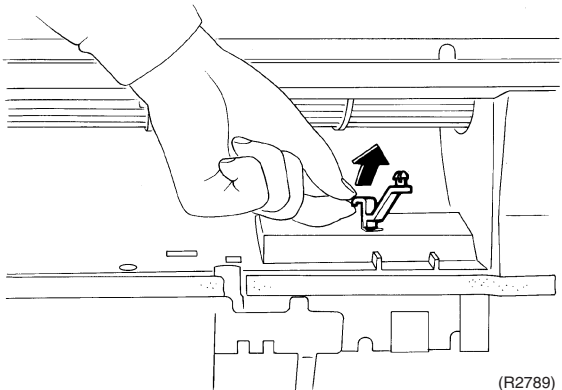
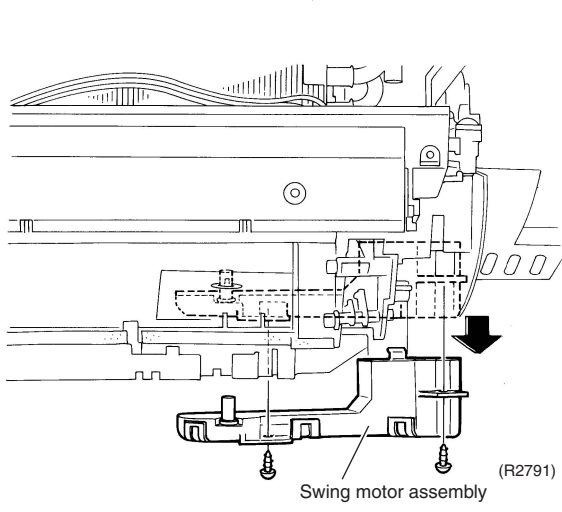
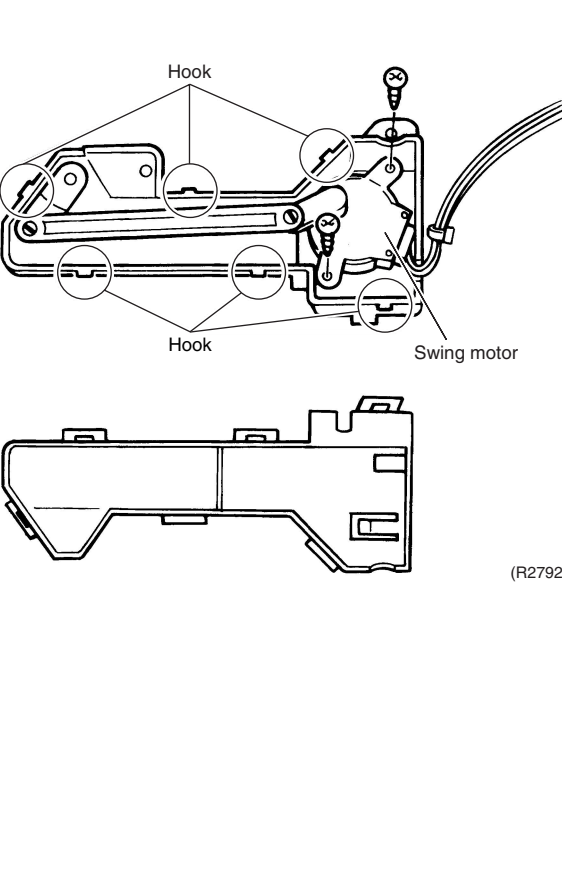


Step	Procedure	Points
<p>10 Dislocate the electrical box to the left and unfasten the back hook.</p> <p>11 Pull the electrical box out.</p>	 <p>(R2777)</p>  <p>(R2778)</p>	<ul style="list-style-type: none"> <li>■ The electrical box has a hook on its back.</li> <li>■ Catch the back hook of the electrical box when reassembling.</li> </ul>
<p>2. Remove the PCBs.</p>	<p>1 Remove the screw on the electrical box.</p>  <p>(R2779)</p> <p>2 Push the shield plate and unfasten the hook.</p>  <p>(R13224)</p>	<ul style="list-style-type: none"> <li>■ Screw: M4 x 16</li> <li>■ The shield plate also has 2 hooks on the upper side.</li> </ul>

Step	Procedure	Points
3	Press the signal receiver unit down and unfasten the hooks on the upper side, and then unfasten the hooks on the lower side.	
4	Cut the clamp.	
5	The signal receiver unit has 4 PCBs. Unfasten the hooks and remove each PCB. Disconnect every connector from each PCB.	<ul style="list-style-type: none"> <li>■ Remove the signal receiver unit while pushing the hooks of connectors.</li> <li>■ Some models have no INTELLIGENT EYE sensor PCB.</li> </ul> 
6	Cut the clamp.	

Step	Procedure	Points
<p>7</p> <p>Unfasten the 2 hooks on the lower side, and then the 2 hooks on the upper side. Remove the control PCB.</p>	<p>(R17129)</p> <p>(R2697)</p>	<p>[S1]: fan motor                  [S6]: swing motor (horizontal blades)                  [S8]: swing motor (vertical blades)                  [S26]: buzzer PCB                  [S28]: signal receiver PCB                  [S32]: indoor heat exchanger thermistor                  [S35]: INTELLIGENT EYE sensor PCB</p> <ul style="list-style-type: none"> <li>■ Some models have no harness for [S8].</li> <li>■ Some models have no INTELLIGENT EYE sensor PCB or harness for [S35].</li> </ul>
<p>3. Remove the swing motor for horizontal blades.</p>	<p>(R2787)</p> <p>(R2788)</p>	
<p>1</p> <p>Remove the screw of the swing motor.</p> <p>2</p> <p>Remove the swing motor.</p>		



Step	Procedure	Points
4.	Remove the swing motor for vertical blades.	<ul style="list-style-type: none"> <li>■ Some models have no swing motor for vertical blades.</li> <li>■ Remove the swing shaft.</li> </ul>
1	Remove the swing shaft on the right side.	<p>(1) Unfasten the hook.</p>  <p>(2) Pull out the swing shaft.</p> <p>(R12896)</p>
2	Remove the 2 screws and detach the swing motor assembly.	
3	Remove the 2 screws and remove the swing motor.	<ul style="list-style-type: none"> <li>■ The assembly has 6 hooks.</li> </ul>
 <p>(R2789)</p>		
 <p>(R2791)</p> <p>Swing motor assembly</p>		
 <p>(R2792)</p>		



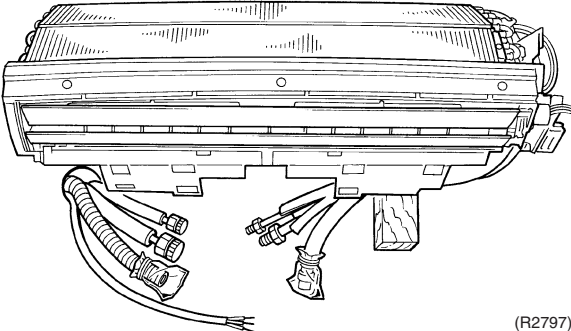
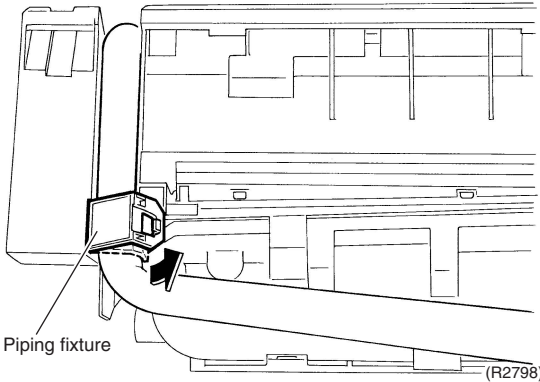
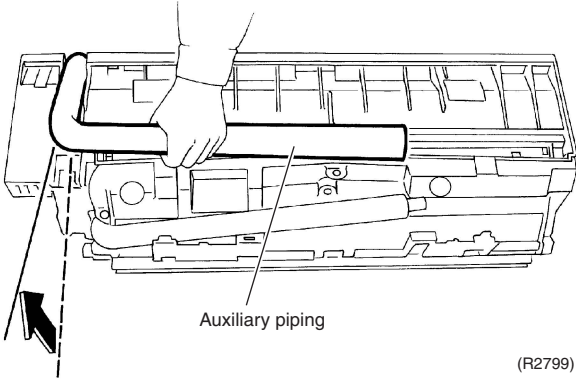
# 5. Removal of Indoor Heat Exchanger


**Procedure**

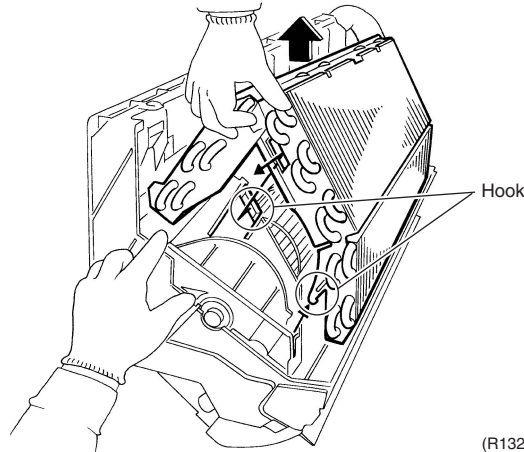


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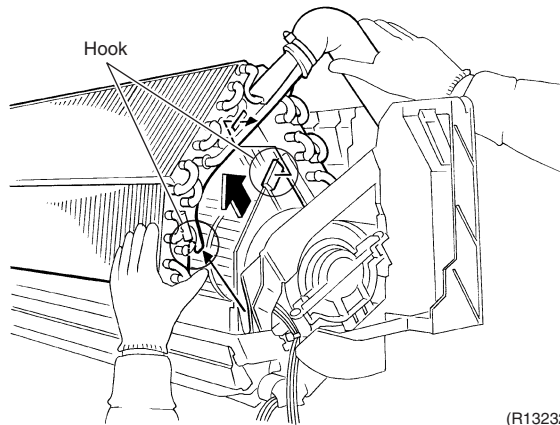
Step	Procedure	Points
1. Disconnect the refrigerant piping.	<p>(R2793)</p>	<p><b>Preparation</b></p> <ul style="list-style-type: none"> <li>Remove the electrical box according to the “Removal of Electrical Box / PCBs / Swing Motors”.</li> </ul> <p><b>Caution</b> If the refrigerant leaks, repair the spot of leaking, then collect all refrigerant from the unit. After conducting vacuum drying, recharge proper amount of refrigerant.</p>
2. Pull out the drain hose.	<p>(R2794)</p>	<p><b>Caution</b> In pump-down work, be sure to stop the compressor before disconnecting the refrigerant pipe. If the refrigerant pipe is disconnected with the compressor operating and the stop valve open, air may be sucked in and may generate an over-pressure in refrigeration cycle, thus resulting in pipe rupture or accidental injury.</p>
3. Unscrew the flare nut for gas piping.	<p>(R2795)</p>	<ul style="list-style-type: none"> <li>Place a plastic sheet under the drain pan to prevent from wetting the floor with remaining drain.</li> <li>If the drain hose is embedded in the wall, disconnect the drain hose beforehand.</li> <li>Carry out the removal works with 2 wrenches.</li> </ul>
4. Unscrew the flare nut for liquid piping.	<p>(R2796)</p>	<ul style="list-style-type: none"> <li>When the pipings are disconnected, protect both the openings of pipe and unit from entering of moisture.</li> </ul>

Step	Procedure	Points
2. Remove the indoor unit.	 <p>(R2797)</p>	
3. Remove the indoor heat exchanger.	<p data-bbox="150 710 467 806">1 Unfasten the hook of the piping fixture on the back of the indoor unit.</p>  <p data-bbox="512 1088 624 1111">Piping fixture</p> <p>(R2798)</p> <p data-bbox="150 1151 400 1214">2 Slightly widen the auxiliary piping.</p>  <p data-bbox="687 1491 815 1514">Auxiliary piping</p> <p>(R2799)</p>	

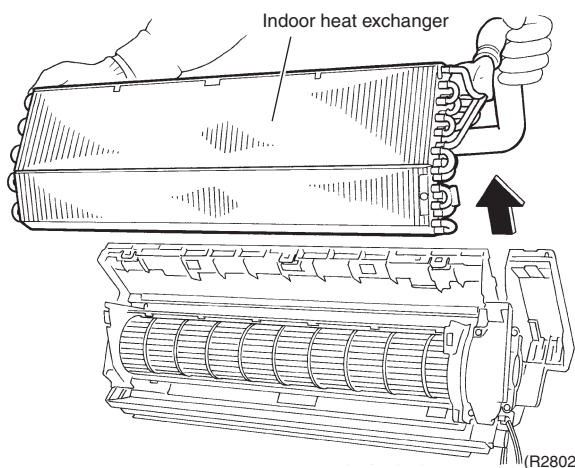
Step	Procedure	Points
3	Unfasten the hooks on the left side.	 <b>Caution</b> When removing or reinstalling the indoor heat exchanger, be sure to wear protective gloves or wrap the indoor heat exchanger with cloths. (You may be injured by the fins.)
4	Push the hooks on the right side and unfasten them.	
5	Pull the indoor heat exchanger to the front side and unfasten the hooks completely, and then lift it.	



(R13231)



(R13232)



(R2802)

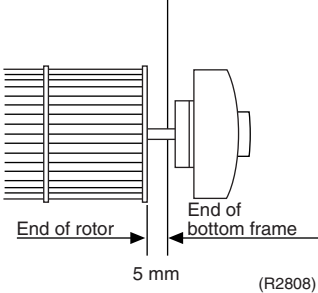
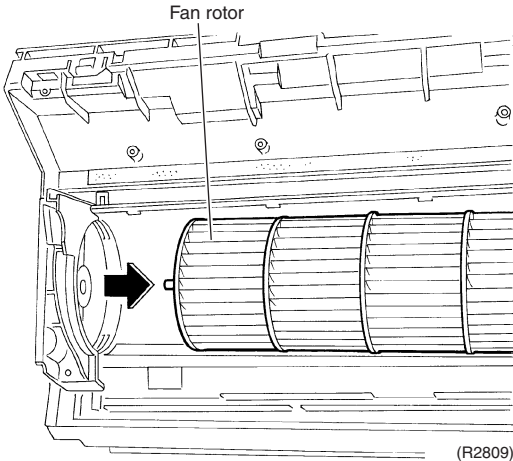
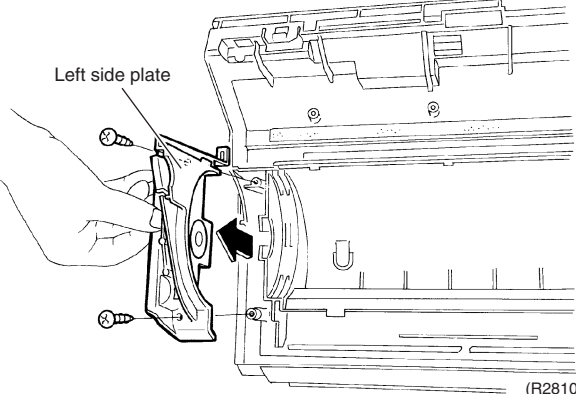
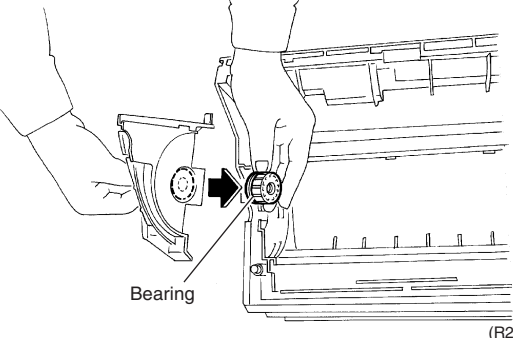
# 6. Removal of Fan Motor / Fan Rotor

**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 right side plate.	<p>Right side plate (R2803)</p>	<ul style="list-style-type: none"> <li>■ You can remove the fan rotor without detaching the right side plate.</li> </ul>
1 Remove the 2 screws.	<p>(R2804)</p>	
2 Lift the right side plate and remove it.		
2. Remove the fan motor and rotor.	<p>Fan motor fixing plate (R2805)</p>	
1 Remove the screw and remove the fan motor fixing plate.		
2 Remove the screw of the fan rotor.	<p>Fan rotor (R2806)</p>	

Step	Procedure	Points
3	Remove the fan motor.	<ul style="list-style-type: none"> <li>When reassembling the fan motor and the fan rotor, provide as much as 5 mm of play between the side face of the rotor and the bottom frame.</li> </ul>
4	Remove the fan rotor.	 <p>(R2808)</p>
5	Remove the 2 screws and remove the left side plate.	 <p>(R2809)</p>  <p>(R2810)</p> <ol style="list-style-type: none"> <li>Insert the fan motor with approx. 5 mm left.</li> <li>Tighten the screw until it stops. Then give the screw one more turn.</li> <li>Rotate the fan rotor and confirm the fan motor and the fan rotor are installed appropriately.</li> <li>Tighten the screw completely if appropriate.</li> <li>If not appropriate, go back to (1).</li> </ol>
6	The bearing is made of rubber. Push it inward and remove it.	 <p>(R2811)</p>

# Revision History

Month / Year	Version	Revised contents
06 / 2013	Si04-855	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

### **DAIKIN INDUSTRIES, LTD.**

Head Office:  
Umeda Center Bldg., 2-4-12, Nakazaki-Nishi,  
Kita-ku, Osaka, 530-8323 Japan

Tokyo Office:  
JR Shinagawa East Bldg., 2-18-1, Konan,  
Minato-ku, Tokyo, 108-0075 Japan

[http://www.daikin.com/global\\_ac/](http://www.daikin.com/global_ac/)

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