






Si041053

REMOVAL PROCEDURE



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

2.0/2.5/3.0 kW Class

-  Indoor Unit
-  Inverter
-  Wall Mounted Type



Service Manual Removal Procedure

Indoor Unit

●Cooling only

**FTKS20JVLT
FTKS25JVLT
FTKS30JVLT**

●Heat Pump

**FTXS20JVLT
FTXS25JVLT
FTXS30JVLT**

Table of Contents

1. Removal of Air Filter / Front Panel	2
2. Removal of Front Grille	5
3. Removal of Horizontal Blades / Vertical Blades	7
4. Removal of Electrical Box / PCBs / Swing Motor	9
5. Removal of Indoor Heat Exchanger	15
6. Removal of Fan Motor / Fan Rotor	18



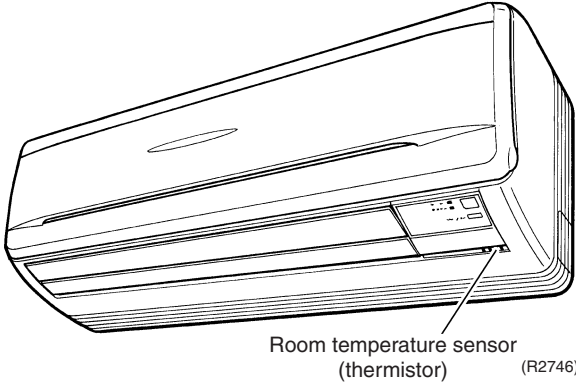
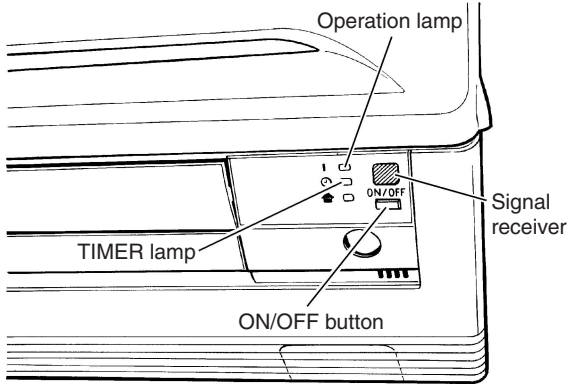
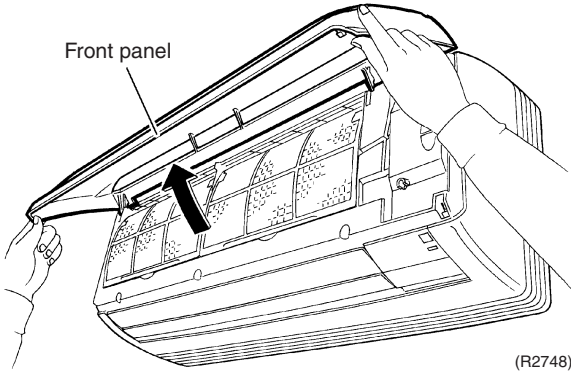
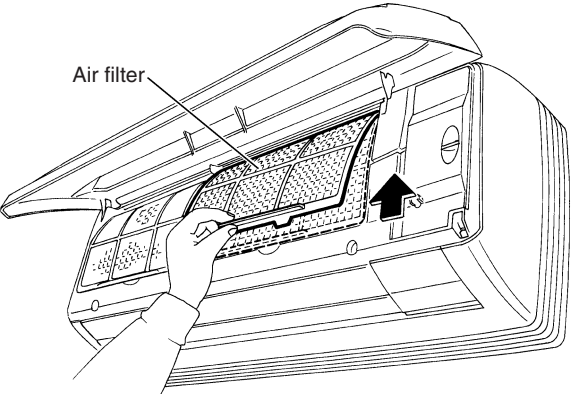
Note: ♦ The illustrations may be slightly different depending on the model.

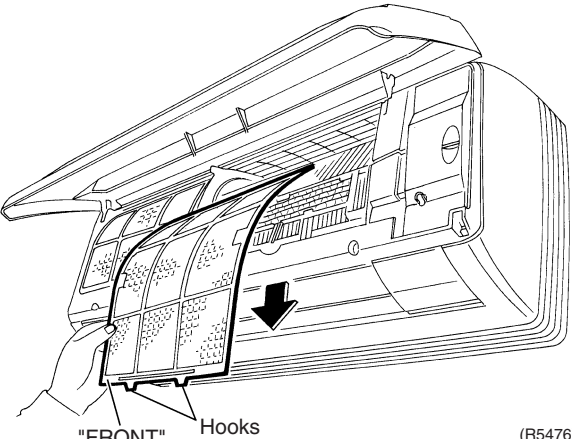
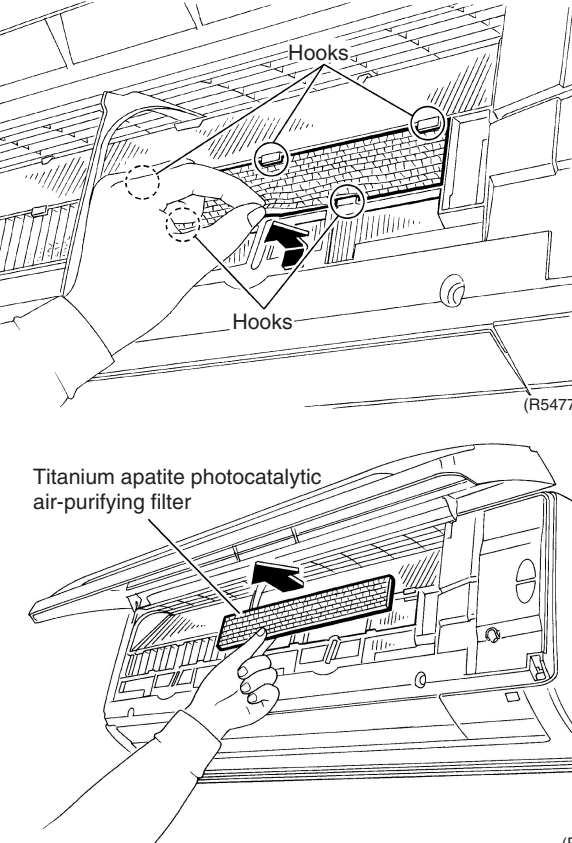
1. Removal of Air Filter / Front Panel

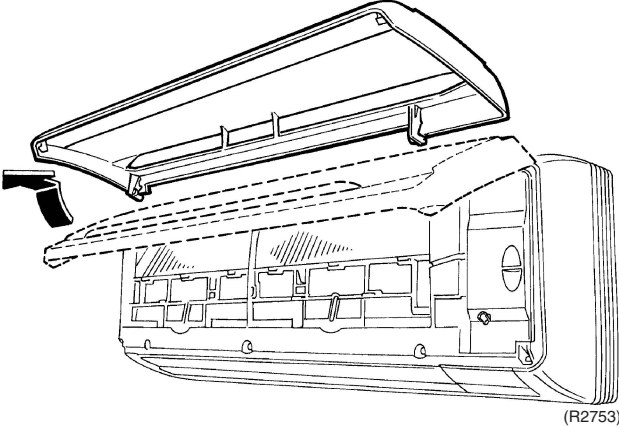
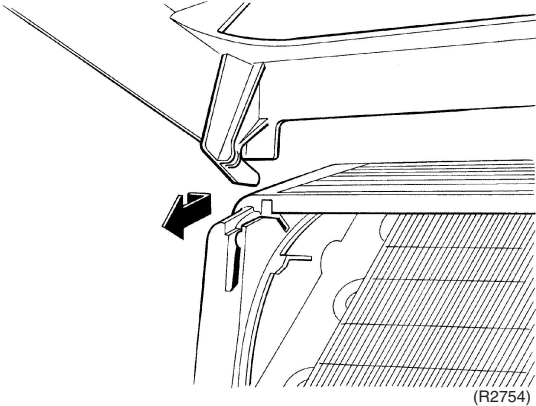
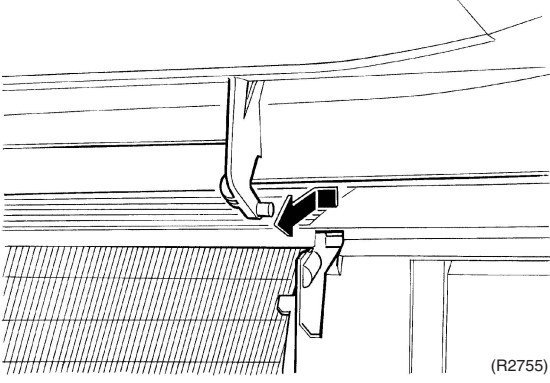
Procedure



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

Step	Procedure	Points
<p>1. Features</p>	 <p>Room temperature sensor (thermistor) (R2746)</p>  <p>Operation lamp Signal receiver ON/OFF button TIMER lamp (R2747)</p>	<p>Warning Dangerous: High voltage A high voltage is applied to all the electric circuits of this product including thermistors.</p> <ul style="list-style-type: none"> ■ 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. ■ When the ON/OFF button is kept pressed for 5 seconds, the forced cooling operation is performed for about 15 minutes.
<p>2. Remove the air filters.</p> <p>1 Hold both sides of the front panel, and open the 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>Front panel (R2748)</p>  <p>Air filter (R2749)</p>	

Step	Procedure	Points	
3	<p>Pull out the air filter downward and remove it.</p>	 <p>(R5476)</p>	<ul style="list-style-type: none"> ■ The air filter is not marked for difference between the right and left sides. ■ The air filter can be set easily by inserting it along the guides. ■ Insert the air filter with the "FRONT" mark faced up. ■ Be sure to insert the hooks (at 2 lower positions) when mounting the air filter.
3.	<p>Remove the Titanium apatite photocatalytic air-purifying filter.</p>		
1	<p>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>(R5477)</p> <p>(R2752)</p>	<ul style="list-style-type: none"> ■ The right and left filters are interchangeable.

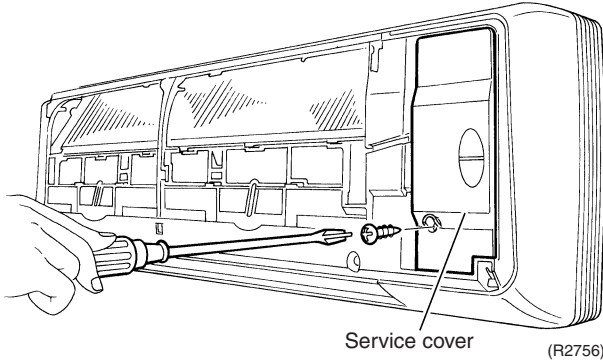
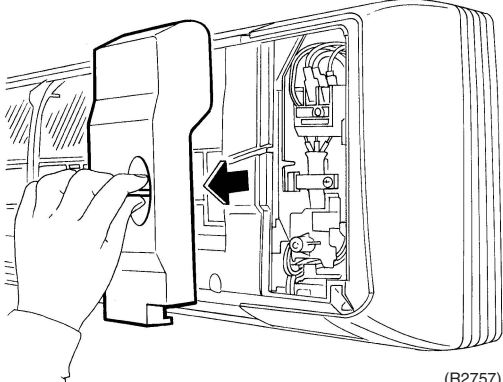
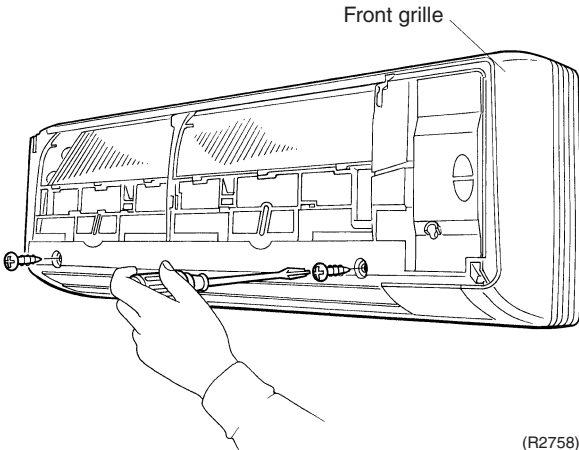
Step	Procedure	Points
<p>4. Remove the front panel.</p> <p>1</p>	<p>While opening the front panel further than it stops, release both the shafts and remove the front panel.</p>   	<ul style="list-style-type: none"> ■ Slide the front panel from side to side to release each shaft. ■ Align the right and left shafts with grooves in turn and insert them to the end when installing.

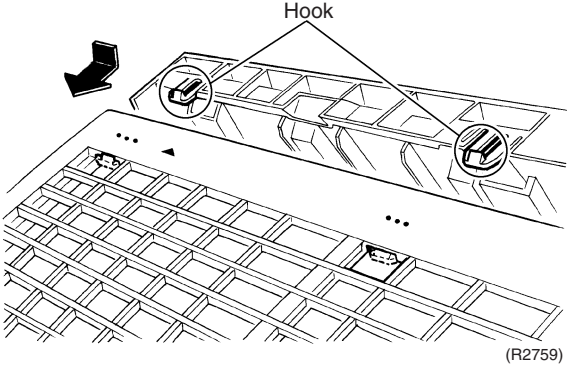
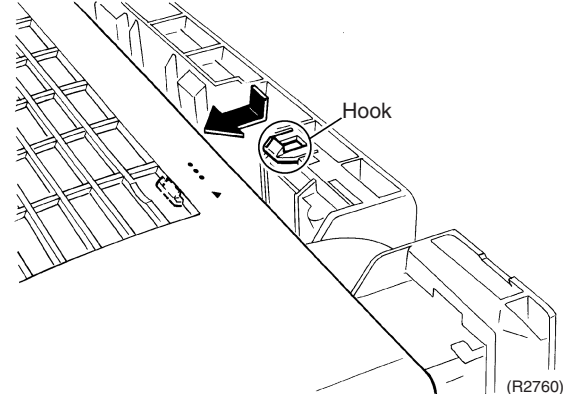
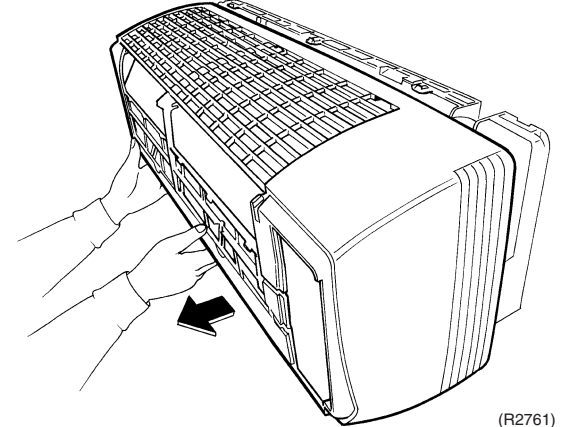
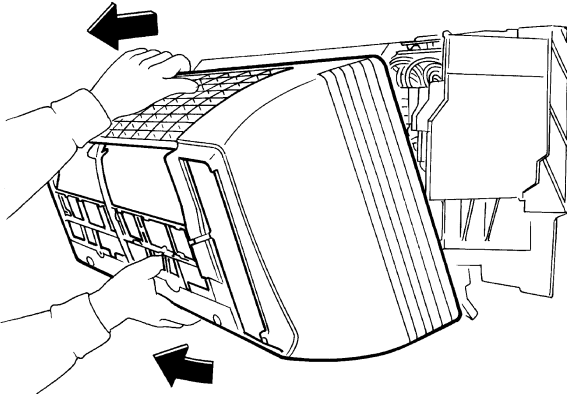
2. Removal of Front Grille

Procedure



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

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

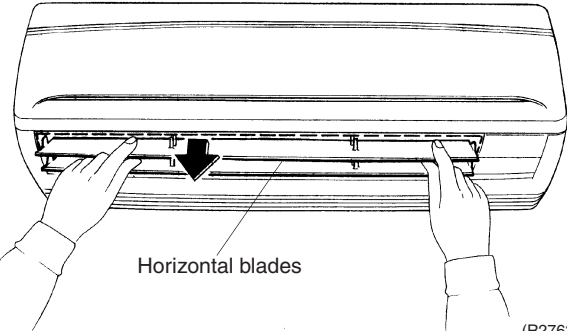
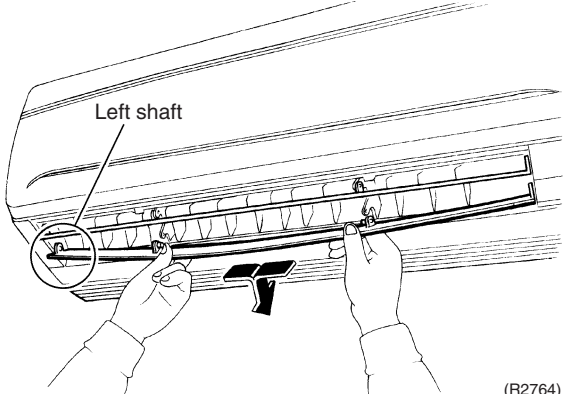
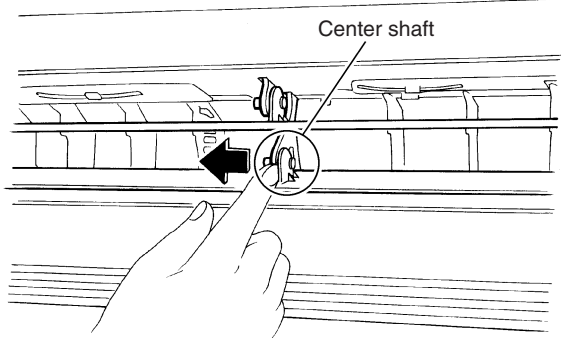
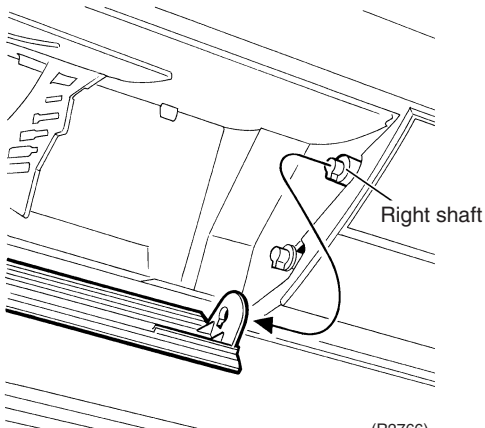
Step	Procedure	Points
<p>2 Unfasten the 3 hooks on the top of the front grille.</p>	 <p>(R2759)</p>  <p>(R2760)</p>  <p>(R2761)</p>	
<p>3 Pull the upper part of the front grille out and lift the lower part up, and then remove the front grille.</p>	 <p>(R2762)</p>	<ul style="list-style-type: none"> ■ Make sure that all the 3 hooks are engaged securely when reassembling.

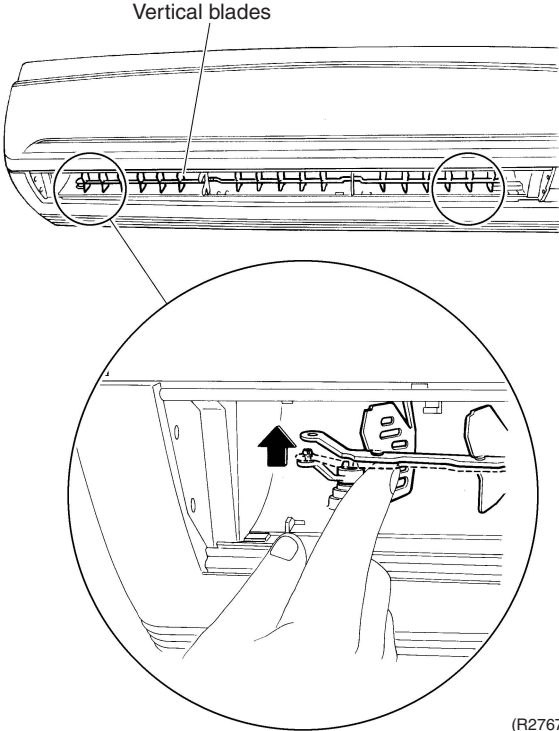
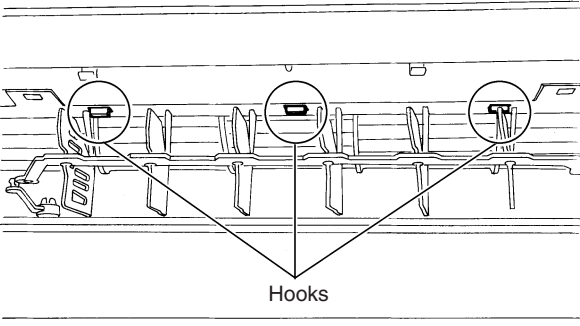
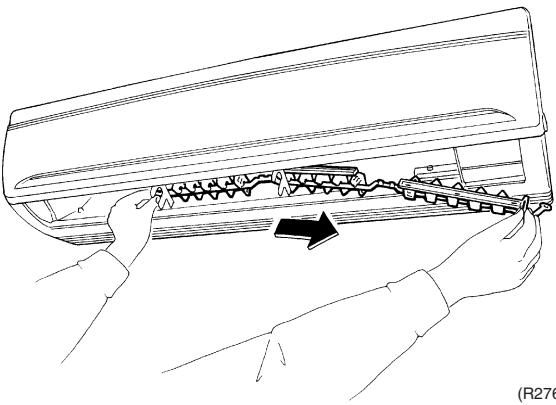
3. Removal of Horizontal Blades / Vertical Blades

Procedure



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

Step	Procedure	Points
1. Remove the horizontal blades.		
1 Open the horizontal blades.	 <p style="text-align: right;">(R2763)</p>	
2 Release the left shaft of the horizontal blades.	 <p style="text-align: right;">(R2764)</p>	
3 Bend the horizontal blades slightly and release the center shaft. Slide the horizontal blades to the left and release the right shaft.	 <p style="text-align: right;">(R2765)</p>	
	 <p style="text-align: right;">(R2766)</p>	<p>■ Installation procedure</p> <ol style="list-style-type: none"> 1. Since the key pattern hook is provided, rotate the blade and fit it to the right shaft first. 2. Fit the blade to the center and left shafts.

Step	Procedure	Points
<p>2. Remove the vertical blades.</p>	<p>1 Release the right and left shafts.</p>  <p>(R2767)</p> <p>2 Unfasten the 3 hooks for each set of vertical blades.</p>  <p>(R5478)</p> <p>3 Pull the vertical blades rightward and remove them.</p>  <p>(R2769)</p>	<ul style="list-style-type: none"> ■ Remove the fan guards beforehand. ■ The unit has 2 sets of vertical blades linked one another with the interlock rods.

4. Removal of Electrical Box / PCBs / Swing Motor

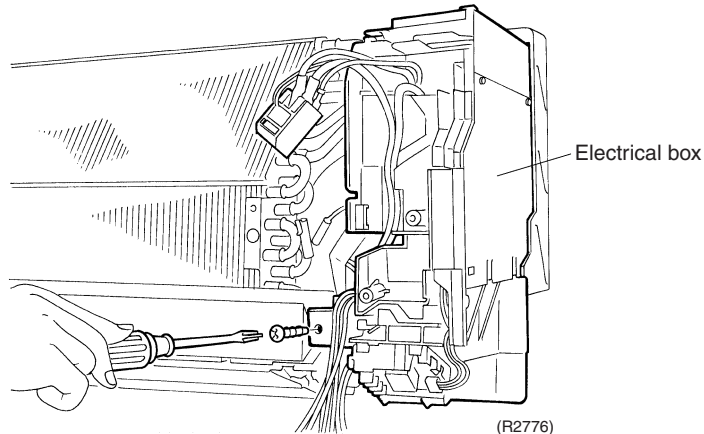
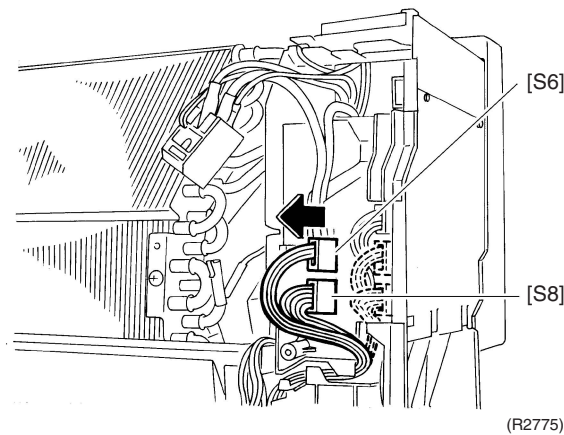
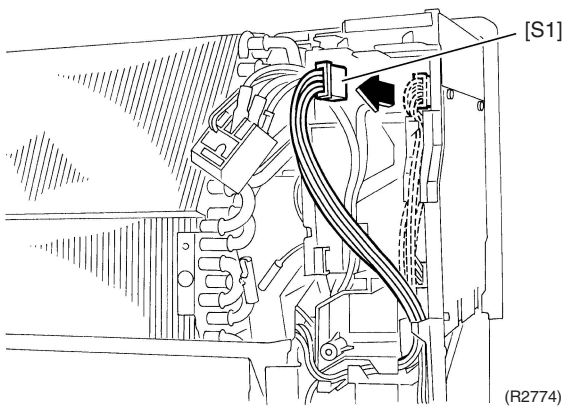
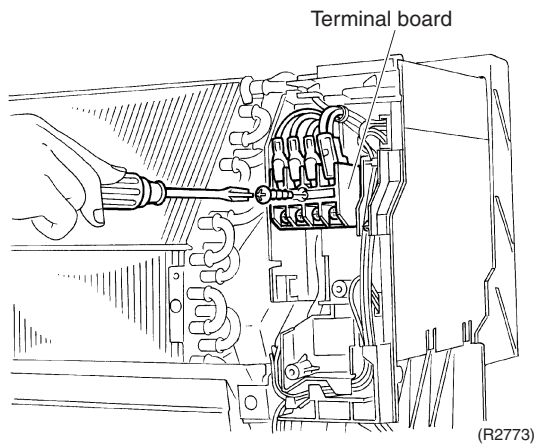
Procedure

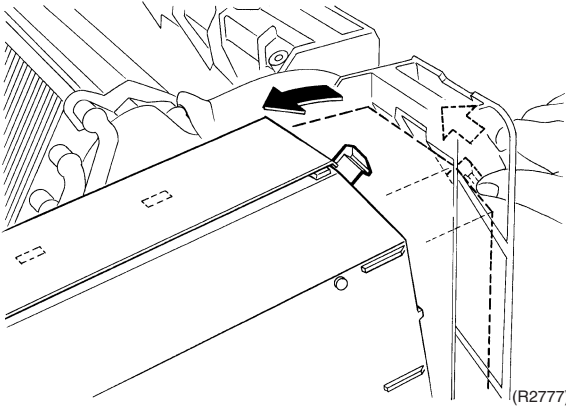
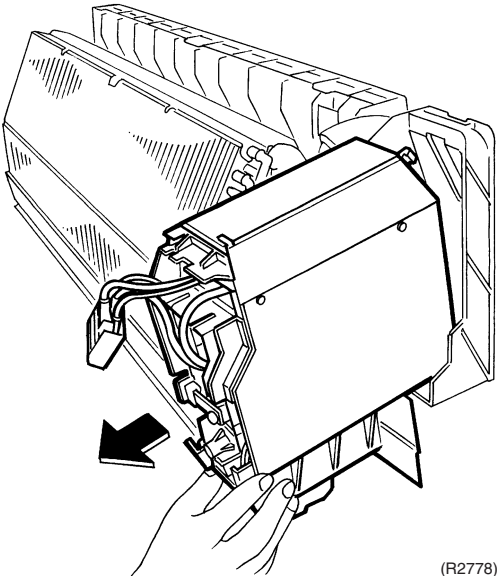
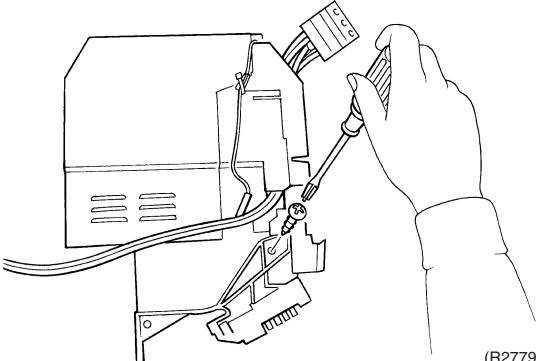
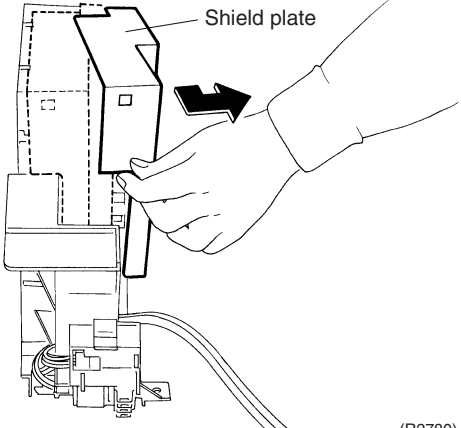


Warning Be sure to wait 10 minutes or more after turning off all power supplies before disassembling work.

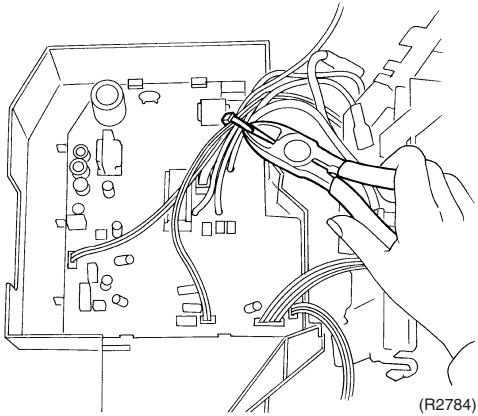
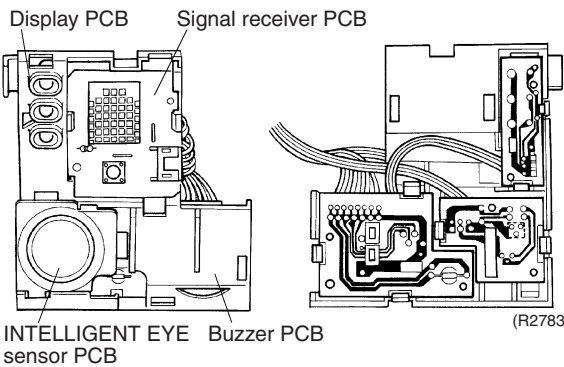
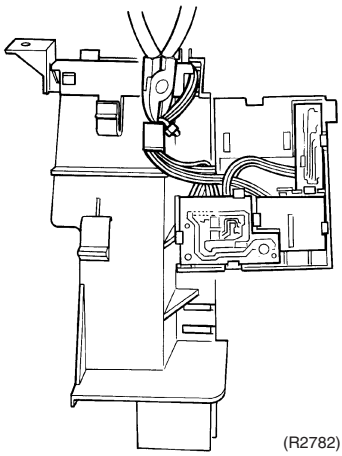
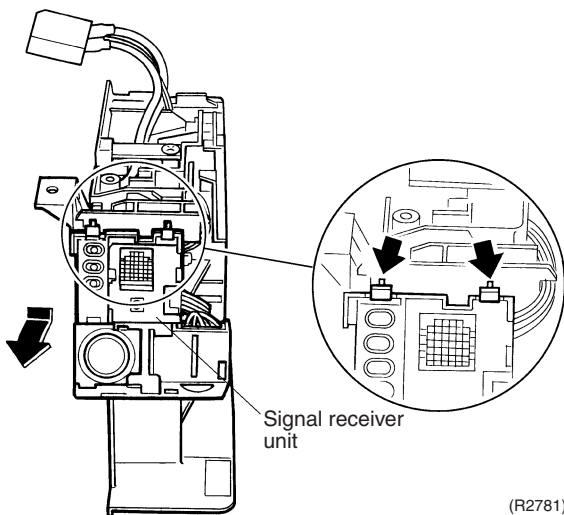
Step	Procedure	Points
1. Remove the electrical box.	<p>(R2770)</p>	<p>Preparation</p> <ul style="list-style-type: none"> Remove the front grille according to the "Removal of Front Grille."
1 Remove the screw and remove the drip proof plate.	<p>Drip proof plate</p> <p>(R2771)</p>	<ul style="list-style-type: none"> Be careful not to lose the clip for the thermistor.
2 Pull out the indoor heat exchanger thermistor.	<p>Indoor heat exchanger thermistor</p> <p>Earth wire</p> <p>(R2772)</p>	
3 Remove the screw of the earth wire.		
4 Remove the screws of the connection wires.		

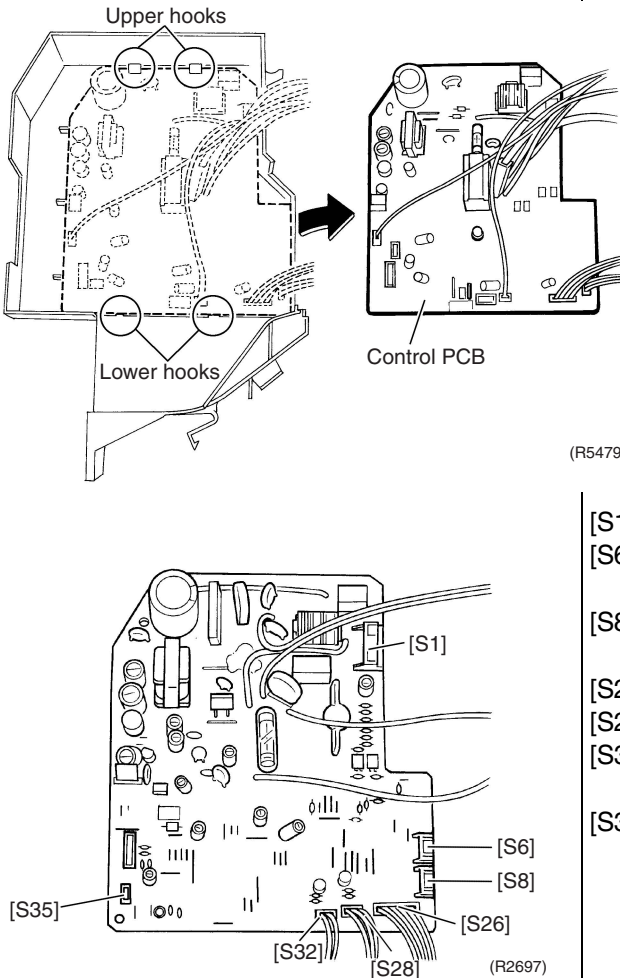
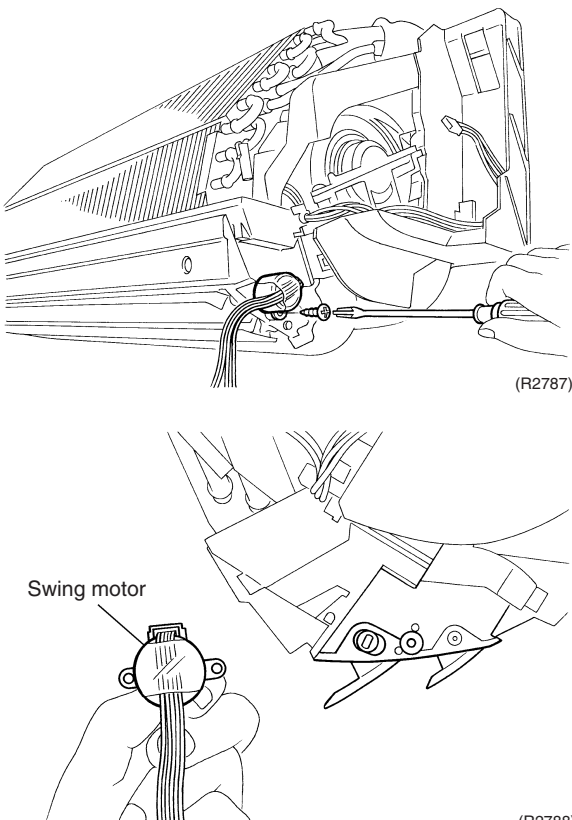
Step	Procedure	Points
5	Remove the screw and remove the terminal board.	<ul style="list-style-type: none"> ■ You can remove the electrical box without detaching the terminal board. ■ Screw: M4 × 30
6	Disconnect the connector for fan motor [S1].	
7	Disconnect the connectors for swing motors [S6] [S8].	<p>[S6]: for horizontal blade [S8]: for vertical blade</p>
8	Remove the screw of the electrical box.	

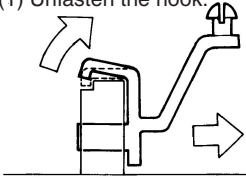


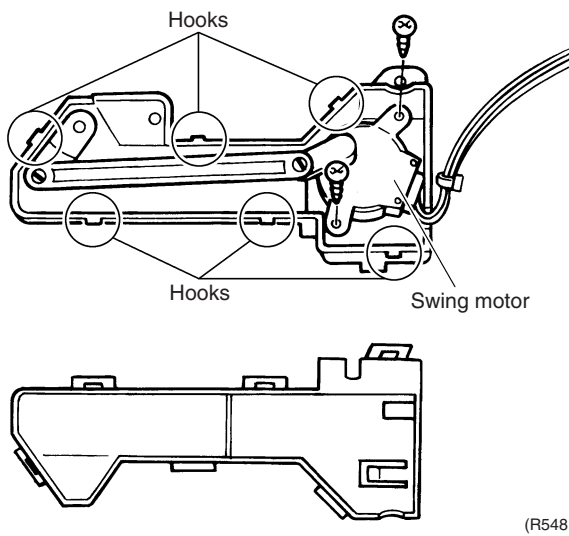
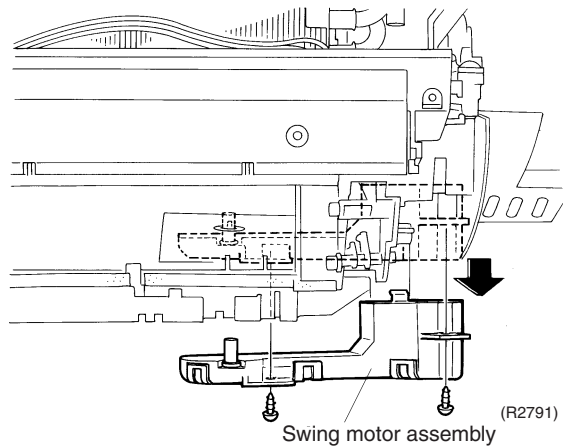
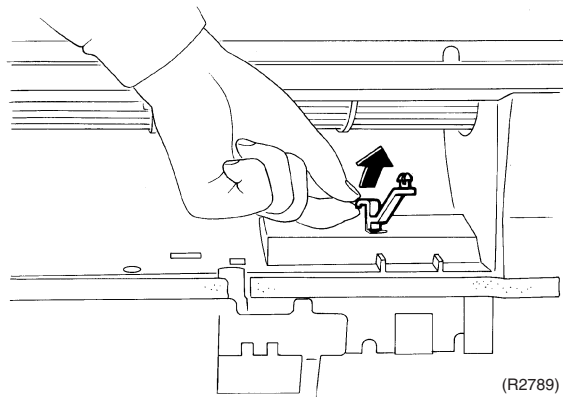
Step	Procedure	Points
<p>9 Dislocate the electrical box to the left and unfasten the back hook.</p> <p>10 Pull the electrical box out.</p>	 <p>(R2777)</p>  <p>(R2778)</p>	<ul style="list-style-type: none"> ■ The electrical box has a hook on its back. ■ Catch the back hook of the electrical box when reassembling.
<p>2. Remove the PCB.</p>		
<p>1 Remove the screw on the electrical box.</p> <p>2 Push the shield plate up and unfasten the hook.</p>	 <p>(R2779)</p>  <p>Shield plate</p> <p>(R2780)</p>	<ul style="list-style-type: none"> ■ Screw: M4 × 16

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 contains 4 PCBs. Unfasten the hooks and remove each PCB. Disconnect every connector from each PCB.	<ul style="list-style-type: none"> ■ Remove the signal receiver unit while pushing the hooks of connectors.
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>Upper hooks</p> <p>Lower hooks</p> <p>Control PCB</p> <p>(R5479)</p> <p>[S1]</p> <p>[S6]</p> <p>[S8]</p> <p>[S26]</p> <p>[S32]</p> <p>[S28]</p> <p>(R2697)</p>	<p>[S1]: fan motor</p> <p>[S6]: swing motor (horizontal blades)</p> <p>[S8]: swing motor (vertical blades)</p> <p>[S26]:buzzer PCB</p> <p>[S28]:signal receiver PCB</p> <p>[S32]:indoor heat exchanger thermistor</p> <p>[S35]:INTELLIGENT EYE sensor PCB</p>
<p>3. Remove the swing motor for horizontal blades.</p>		
<p>1</p> <p>Remove the screw of the swing motor.</p> <p>2</p> <p>Remove the swing motor.</p>	 <p>Swing motor</p> <p>(R2787)</p> <p>(R2788)</p>	

Step	Procedure	Points
4.	Remove the swing motor for vertical blades.	
1	Remove the swing shaft on the right side.	<p>■ Remove the swing shaft.</p> <p>(1) Unfasten the hook.</p>  <p>(2) Pull out the swing shaft. (R9075)</p>
2	Remove the 2 screws and detach the swing motor assembly.	
3	Remove the 2 screws and remove the swing motor.	<p>■ The assembly has 6 hooks.</p>



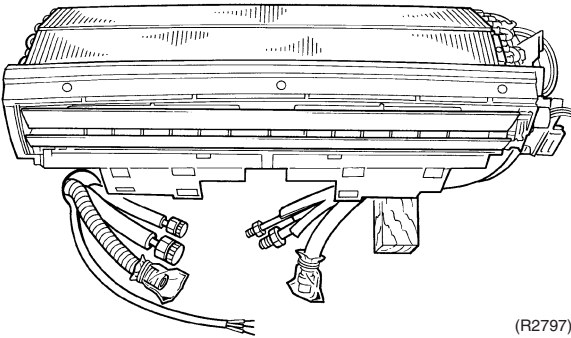
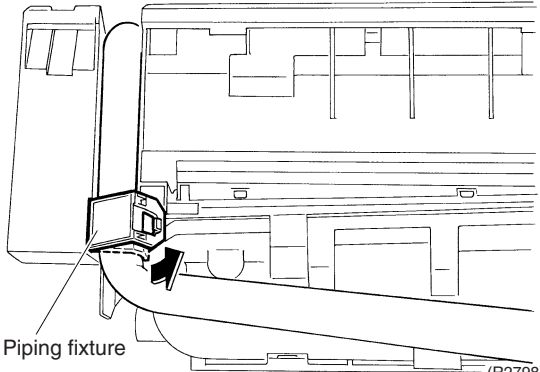
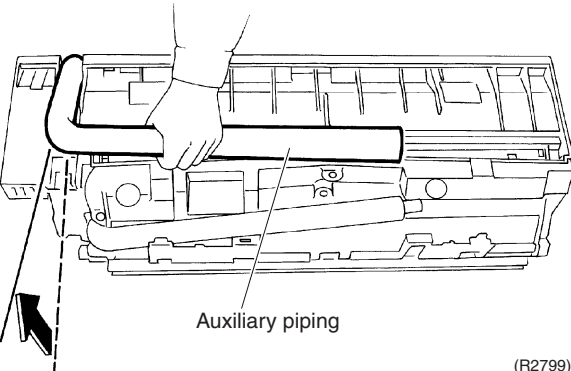
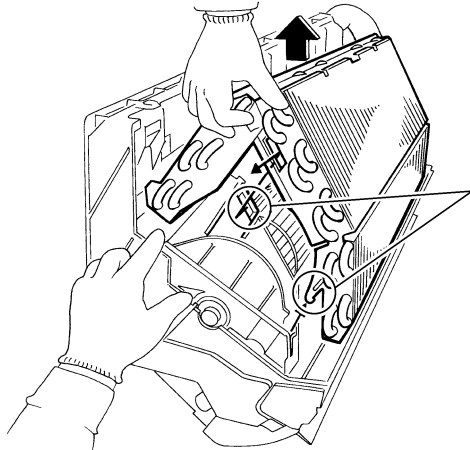
5. Removal of Indoor Heat Exchanger

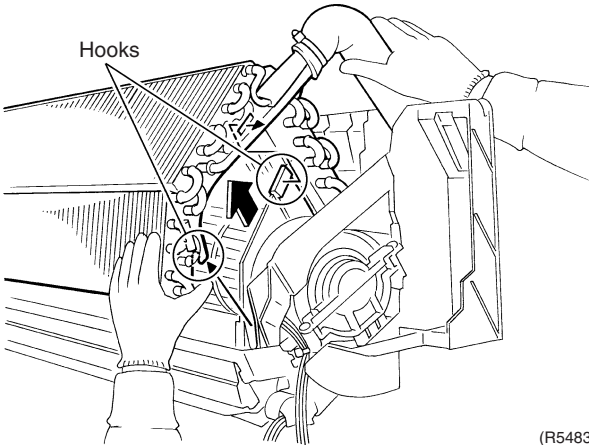
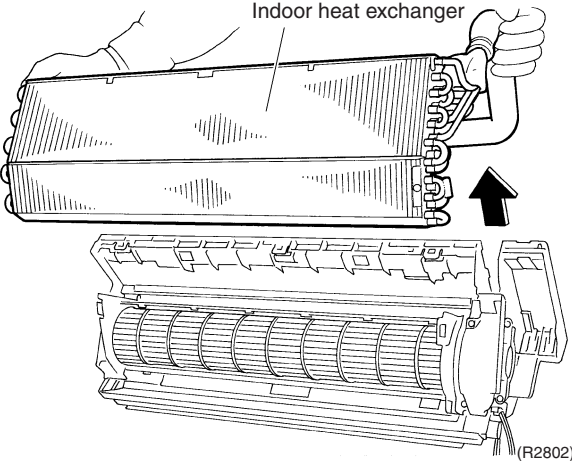
Procedure



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

Step	Procedure	Points
1. Disconnect the refrigerant piping.		<p>Preparation</p> <ul style="list-style-type: none"> Remove the electrical box according to the “Removal of Electrical Box / PCB / Swing Motor”.
1 Hold the indoor unit up with a piece of wood etc..	<p>(R2793)</p>	<p>Caution</p> <p>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>Drain hose</p> <p>(R2794)</p>	<p>Caution</p> <p>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 to generate an over-pressure in refrigeration cycle, thus resulting in pipe rupture or accidental injury.</p>
3 Unscrew the flare nut for gas piping with 2 wrenches.	<p>(R2795)</p>	<ul style="list-style-type: none"> Place a plastic sheet under the drain pan to prevent from wetting the floor with remaining drain. If the drain hose is embedded in the wall, disconnect the drain hose beforehand. Carry out the removal works with 2 wrenches. When the pipes are disconnected, protect both the openings of pipe and unit from entering of moisture.
4 Unscrew the flare nut for liquid piping with 2 wrenches.	<p>Liquid piping</p> <p>Gas piping</p> <p>(R2796)</p>	

Step	Procedure	Points
<p>2. Remove the indoor unit.</p> <p>1 Detach the indoor unit from the installation plate.</p>	 <p>(R2797)</p>	
<p>3. Remove the piping fixture.</p> <p>1 Unfasten the hook on the upper side of the piping fixture on the back of the unit.</p>	 <p>Piping fixture</p> <p>(R2798)</p>	
<p>4. Remove the indoor heat exchanger.</p> <p>1 Slightly widen the auxiliary piping.</p> <p>2 Unfasten the hooks on the left side.</p>	 <p>Auxiliary piping</p> <p>(R2799)</p>  <p>Hooks</p> <p>(R5482)</p>	<p>Caution 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.)</p>

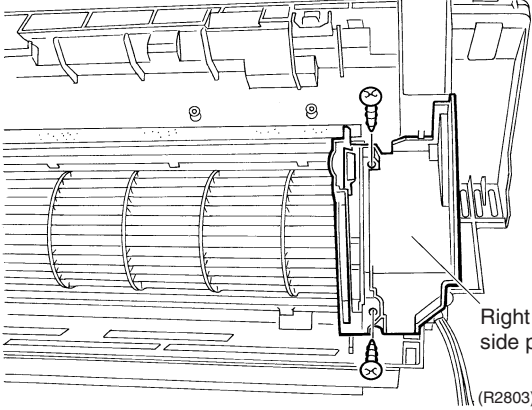
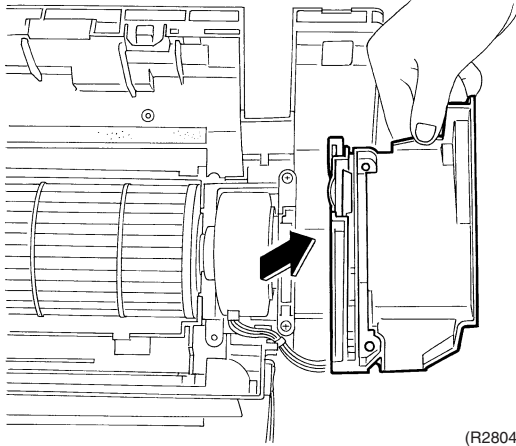
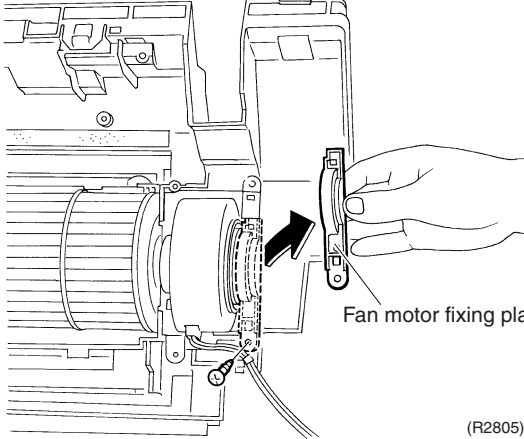
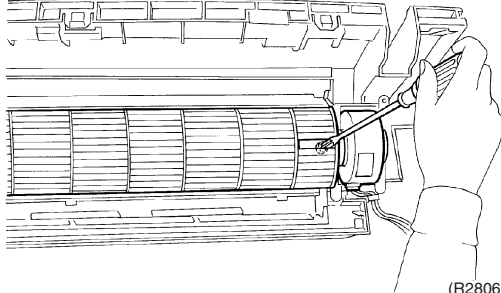
Step	Procedure	Points
3	Push the hooks on the right side and unfasten them.	
	 <p>Diagram illustrating the removal of hooks from the indoor heat exchanger. A hand is shown pushing the hooks on the right side. The label 'Hooks' points to the fasteners. The reference code '(R5483)' is located below the diagram.</p>	
4	Pull the indoor heat exchanger to the front side and unfasten the hooks completely, and then lift it.	
	 <p>Diagram illustrating the removal of the indoor heat exchanger. The heat exchanger is shown being pulled forward and then lifted. The label 'Indoor heat exchanger' points to the component. The reference code '(R2802)' is located below the diagram.</p>	

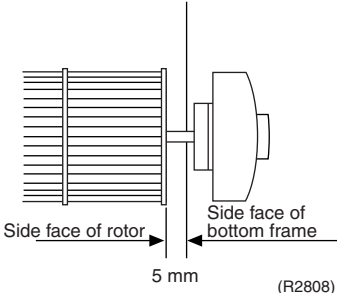
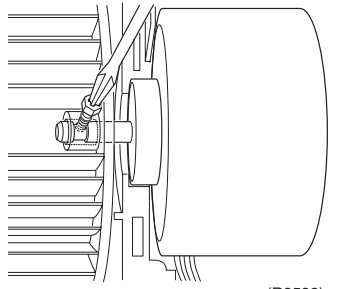
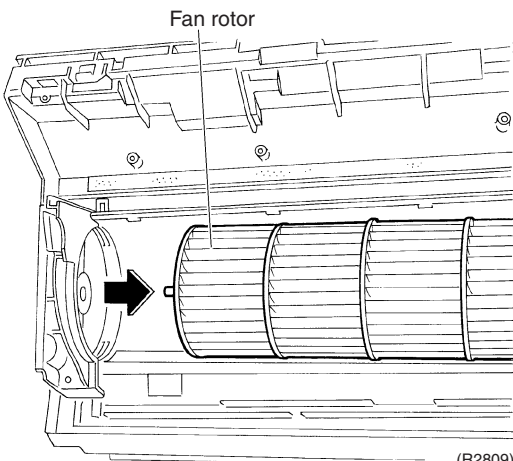
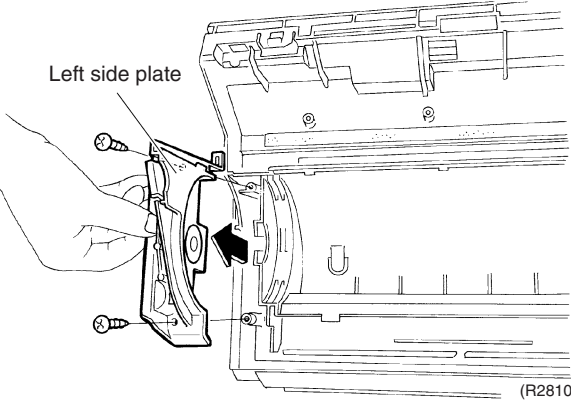
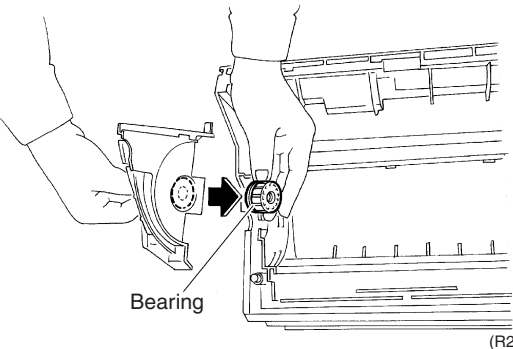
6. Removal of Fan Motor / Fan Rotor

Procedure



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

Step	Procedure	Points
<p>1. Remove the right side plate.</p> <p>1 Remove the 2 screws.</p> <p>2 Lift the right side plate and remove it.</p>	 <p>Right side plate (R2803)</p>  <p>(R2804)</p>	<p>■ You can remove the fan rotor without detaching the right side plate.</p>
<p>2. Remove the fan motor and rotor.</p> <p>1 Remove the screw and remove the fan motor fixing plate.</p> <p>2 Remove the screw of the fan rotor.</p>	 <p>Fan motor fixing plate (R2805)</p>  <p>(R2806)</p>	

Step	Procedure	Points
3	Remove the fan motor.	<ul style="list-style-type: none"> ■ 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.
4	Remove the fan rotor.	 <p>(R2808)</p>
5	Remove the 2 screws and remove the left side plate.	 <p>(R9582)</p> <ol style="list-style-type: none"> (1) Insert the fan motor with approx. 5 mm left. (2) Tighten the screw until it stops. Then turn the screw in one scroll. (3) Move the fan rotor and confirm the fan motor and the fan rotor are installed appropriately. (4) Tighten the screw completely if appropriate. (5) If not appropriate, go back to (1).
6	The bearing is made of rubber. Push it inward and remove it.	 <p>(R2809)</p>  <p>(R2810)</p>
		 <p>(R2811)</p>

Revision History

Month / Year	Version	Revised contents
01 / 2013	Si041053	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/

©All rights reserved