




REMOVAL PROCEDURE



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

2.0/2.5/3.5/4.2/5.0 kW Class

-  Indoor Unit
-  Inverter
-  Wall Mounted Type



Service Manual Removal Procedure

Indoor Unit

●Cooling Only

**FTXS20G2V1B
FTXS25G2V1B
FTXS35G2V1B
FTXS42G2V1B
FTXS50G2V1B**

●Heat Pump

**ATXS20G2V1B
ATXS25G2V1B
ATXS35G2V1B
ATXS42G2V1B
ATXS50G2V1B**

**FTXS20G2V1B
FTXS25G2V1B
FTXS35G2V1B
FTXS42G2V1B
FTXS50G2V1B**

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

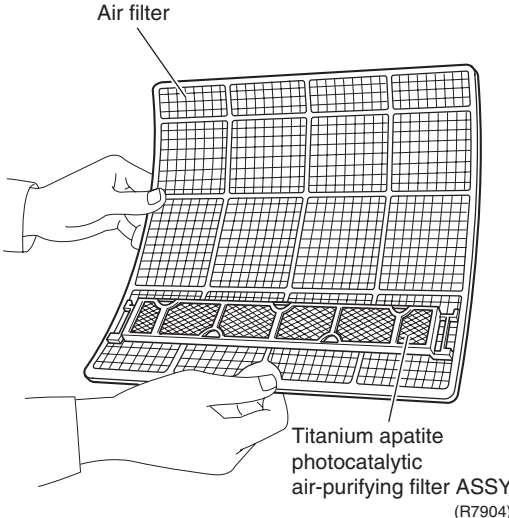
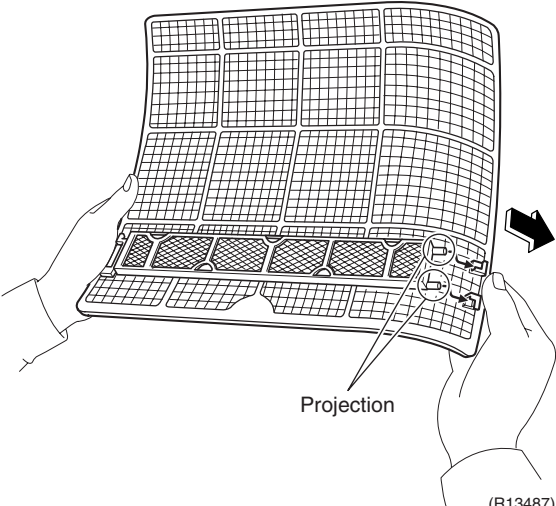
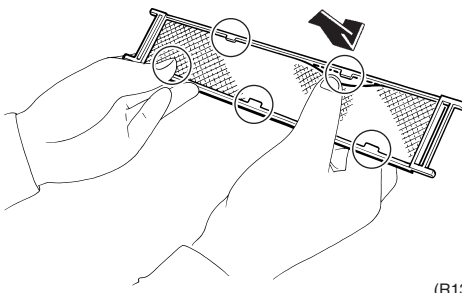
1. Removal of Air Filters

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>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 Open the front panel to the position where it stops.</p> <p>2 Slightly push up the center knob of the air filter and release the hooks.</p> <p>3 Pull out the air filter downward and remove it.</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 reassembling the air filter.

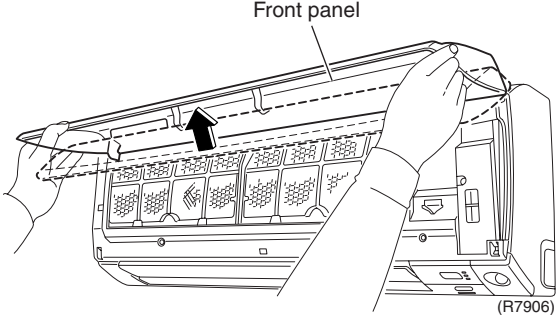
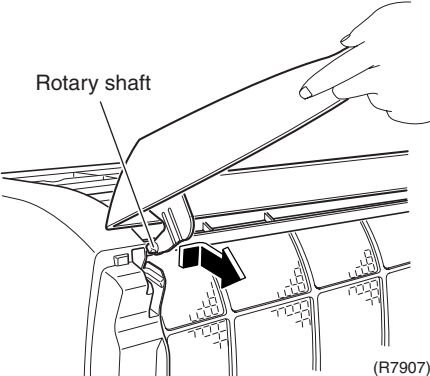
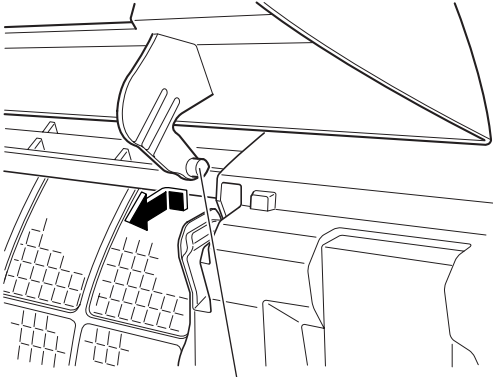
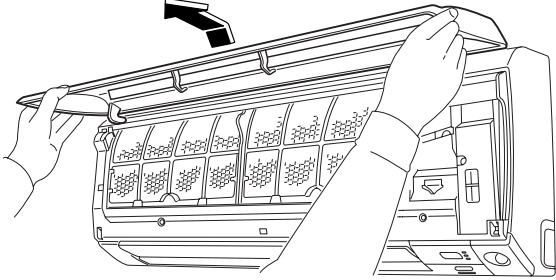
Step	Procedure	Points
3.	<p>Remove the Titanium apatite photocatalytic air-purifying filters.</p>	
1	<p>The Titanium apatite photocatalytic air-purifying filter ASSY is attached to the back of the air filter.</p> 	<ul style="list-style-type: none"> ■ The right and left filters are interchangeable.
2	<p>Remove the Titanium apatite photocatalytic air-purifying filter ASSY by unfastening the projections from the back of the air filter frame.</p> 	
3	<p>Unfasten the 5 hooks and remove the Titanium apatite photocatalytic air-purifying filter from its frame.</p> 	

2. Removal of 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
1	<p>Open the front panel over the position where it stops.</p>  <p style="text-align: right;">(R7906)</p>	
2	<p>Slide the left rotary shaft to the right and release it.</p>  <p style="text-align: right;">(R7907)</p>	<p>■ When reassembling the front panel, fit the right and left rotary shafts one by one into the grooves and fully push them into position.</p>
3	<p>Slide the right rotary shaft to the left and release it.</p>  <p style="text-align: right;">(R7909)</p>	
4	<p>Remove the front panel.</p>  <p style="text-align: right;">(R7910)</p>	

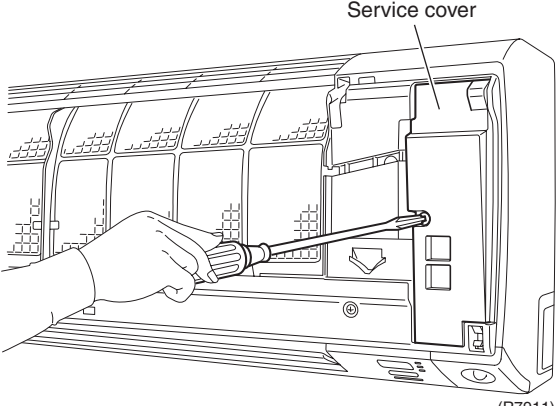
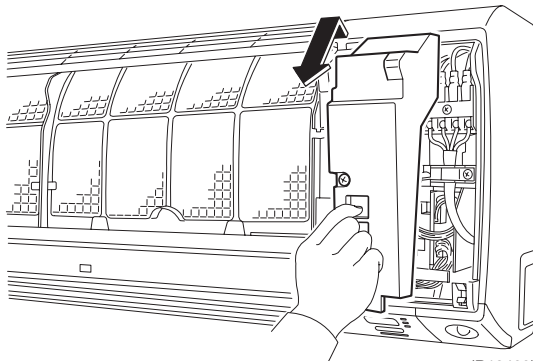
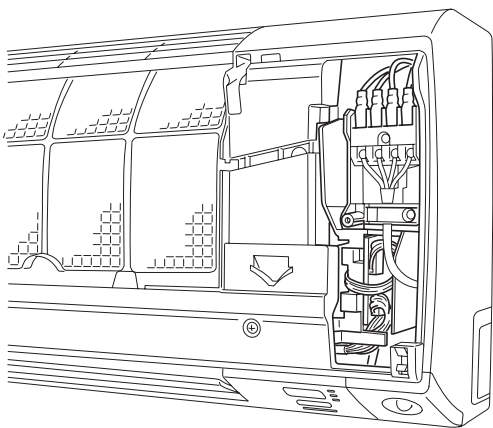
3. Removal of Front Grille

Procedure

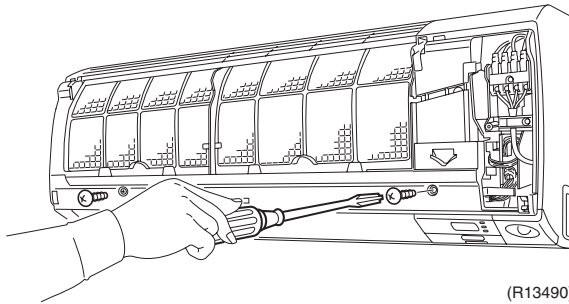


Warning

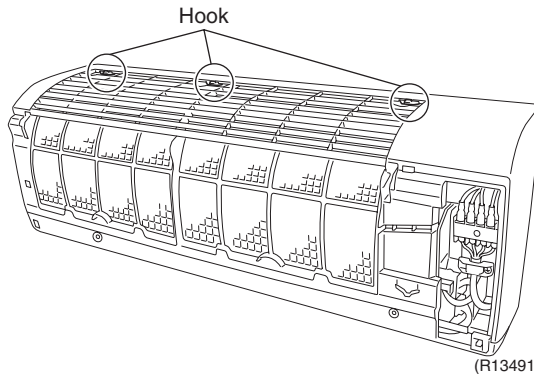
Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1.	Remove the service cover.	
1	Remove the screw of the service cover.  <p style="text-align: right;">(R7911)</p>	Preparation ■ Remove the front panel according to the "Removal of Front Panel".
2	Pull out the service cover diagonally down in the direction of the arrow.  <p style="text-align: right;">(R13488)</p>	
3	The figure shows the inside.  <p style="text-align: right;">(R13489)</p>	

Step	Procedure	Points
2.	Remove the front grille.	
1	Remove the 2 screws.	
2	Unfasten the 3 hooks at the top.	<ul style="list-style-type: none"> ■ The convex marks (...) on the front panel indicate the position of the hooks.
3	Pull the upper part of the front grille out and lift the lower part up, and then remove the front grille.	<ul style="list-style-type: none"> ■ When reassembling, make sure that all the 3 hooks are fastened as they were.

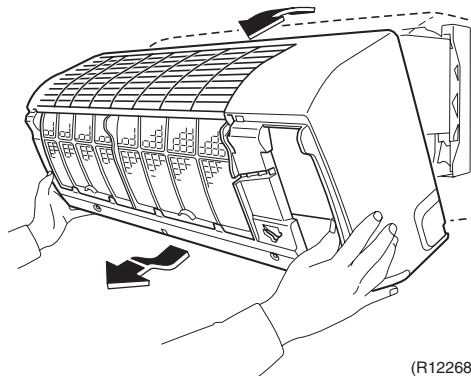


(R13490)



(R13491)

(R12715)



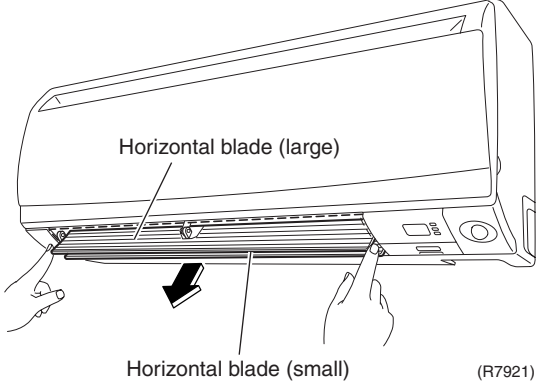
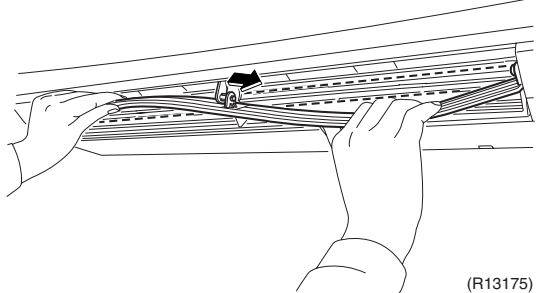
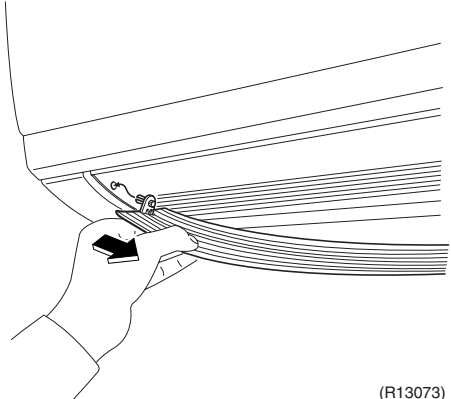
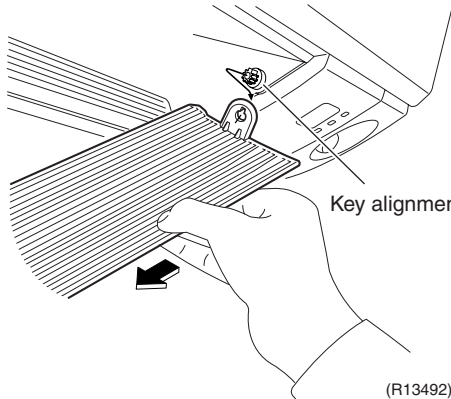
(R12268)

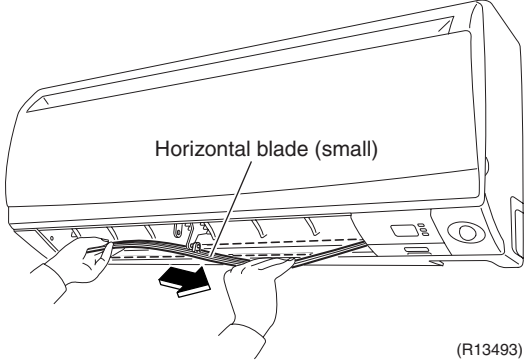
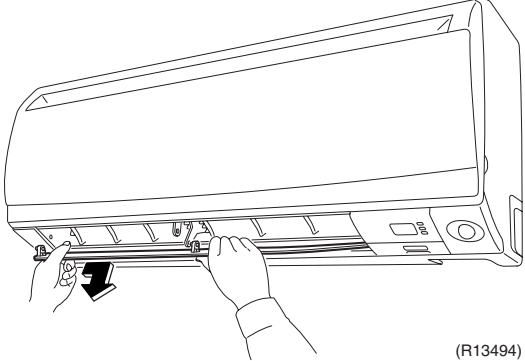
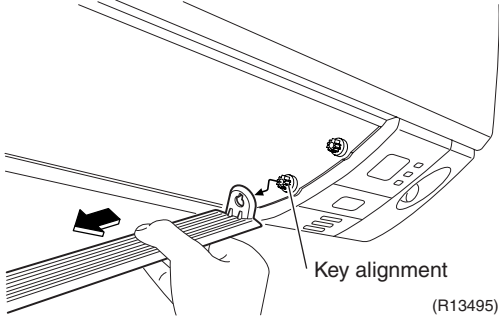
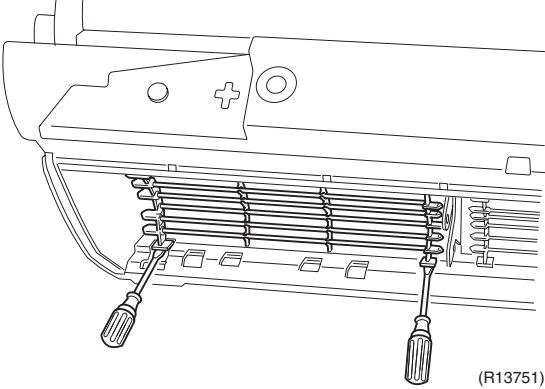
4. Removal of Horizontal Blades / Vertical Blades

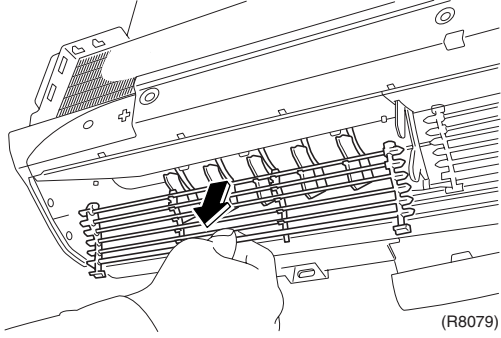
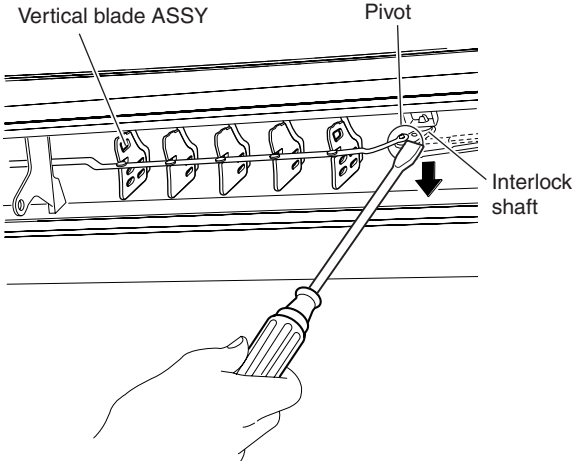
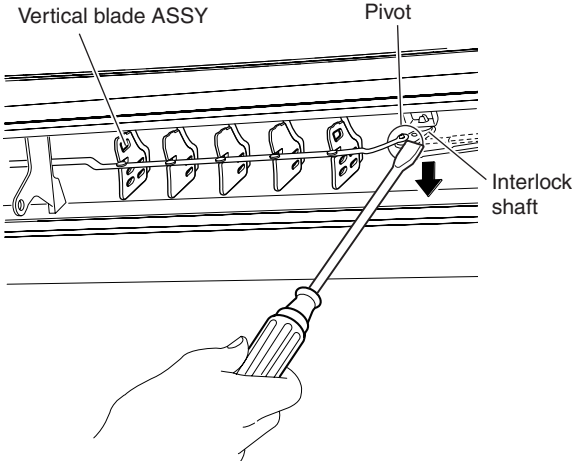
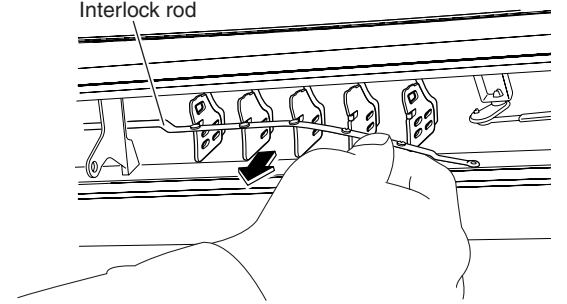
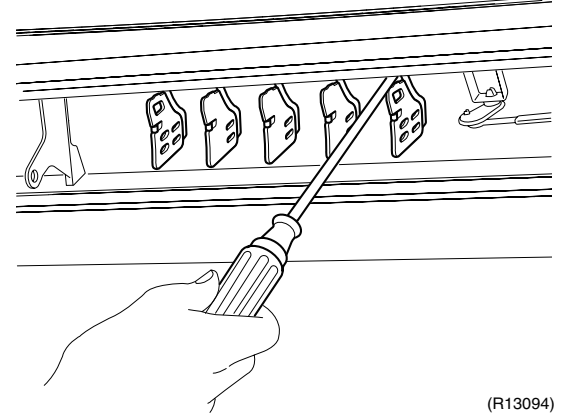
Procedure



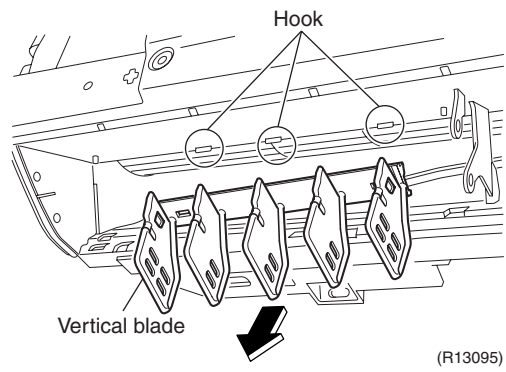
Warning Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1. Remove the horizontal blade (large).		
1 Open the horizontal blade (large).		<ul style="list-style-type: none"> ■ When reassembling, mount the large horizontal blade to the upper position and the small horizontal blade to the lower position. Do not put them in the wrong place.
2 Unfasten the center shaft while bending the horizontal blade (large) slightly.		
3 Unfasten the left shaft.		
4 Unfasten the right shaft.		<ul style="list-style-type: none"> ■ There is a key alignment at the right shaft. When reassembling, insert the right shaft first while turning. ■ After inserting the right shaft, first mount the horizontal blade to the center shaft and then to the left shaft.

Step	Procedure	Points
<p>2. Remove the horizontal blade (small).</p> <p>1 Unfasten the center shaft while bending the horizontal blade (small) slightly.</p> <p>2 Unfasten the left shaft.</p> <p>3 Unfasten the right shaft.</p>	  	<ul style="list-style-type: none"> ■ There is a key alignment at the right shaft. When reassembling, insert the right shaft first while turning. ■ After inserting the right shaft, first mount the horizontal blade to the center shaft, and then to the left shaft.
<p>3. Remove the fan guard.</p> <p>1 Unfasten the hooks at the lower part of the fan guard with a flat screwdriver.</p>		

Step		Procedure	Points
2	Remove the fan guard.	 <p>(R8079)</p>	
4. Remove the vertical blade ASSYs.		<p>Vertical blade ASSY Pivot</p>  <p>(R13092)</p>	
1	Detach the pivot from the interlock shaft for vertical blades with a flat screwdriver.	 <p>(R13092)</p>	
2	Remove the interlock rod.	<p>Interlock rod</p>  <p>(R13093)</p>	
3	Unfasten the hooks at the upper 3 positions by pressing them with a flat screwdriver.	 <p>(R13094)</p>	

Step	Procedure	Points
4	Remove the vertical blade ASSY.	<ul style="list-style-type: none"> ■ A vertical blade ASSY has 5 fins. It is impossible to replace only one fin. ■ The vertical blade ASSY is not marked for difference between right and left.

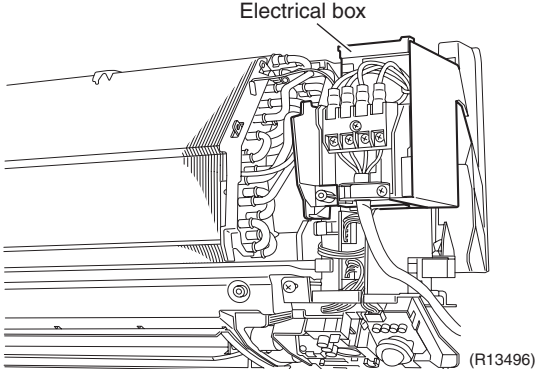
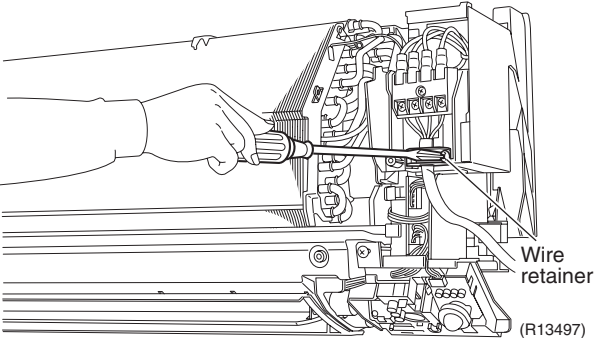
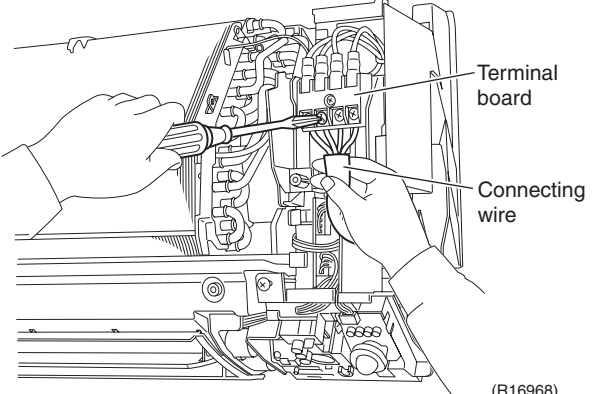
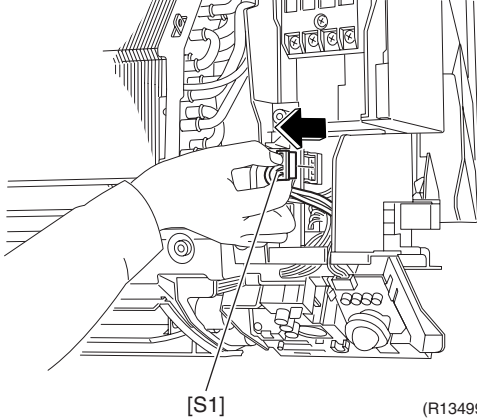


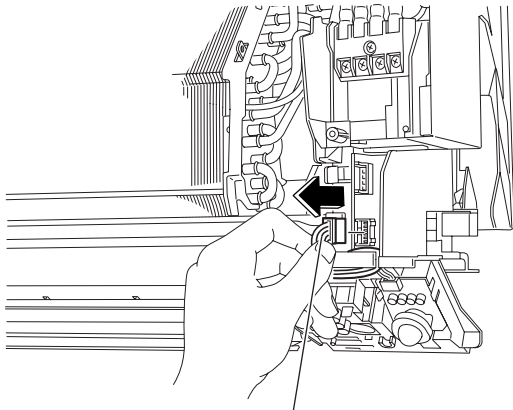
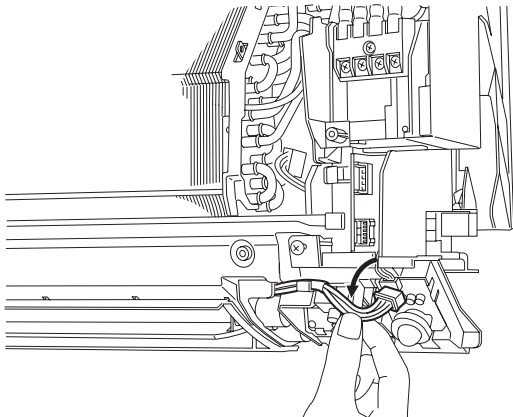
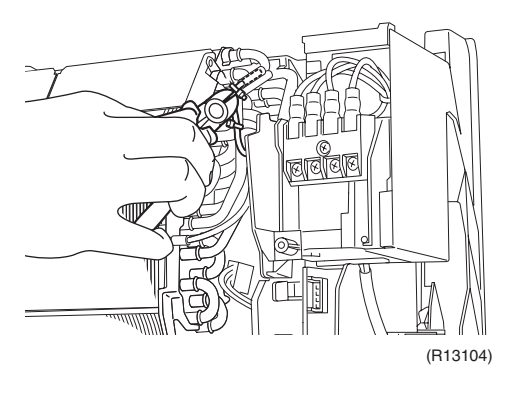
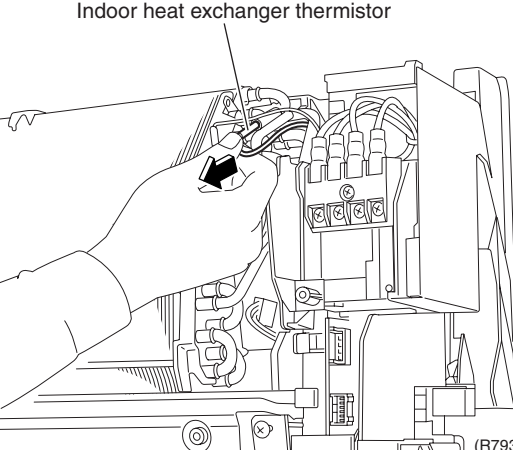
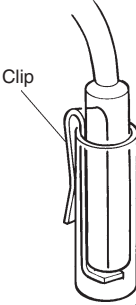
5. Removal of Electrical Box

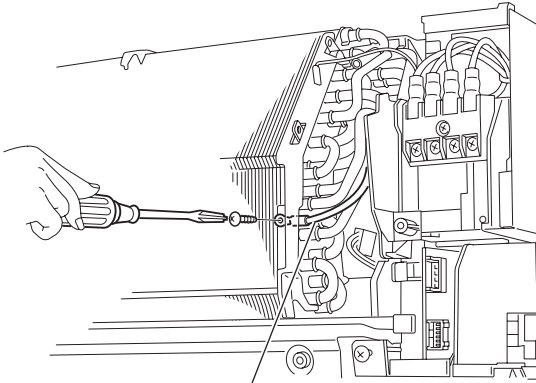
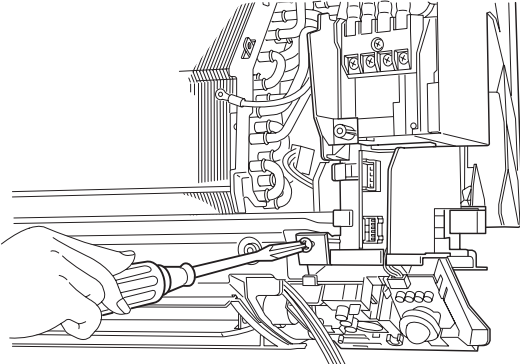
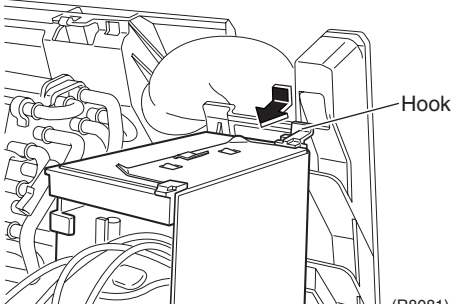
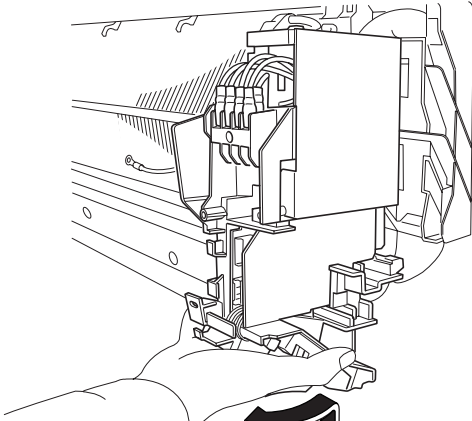
Procedure



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Step	Procedure	Procedure	Points
1	The figure shows the connections of the wire harnesses.	 <p>Electrical box</p> <p>(R13496)</p>	Preparation <ul style="list-style-type: none"> Remove the front grille according to the "Removal of Front Grille".
2	Remove the screw of the wire retainer.	 <p>Wire retainer</p> <p>(R13497)</p>	
3	Remove the 4 screws of the terminal board and disconnect the connecting wires.	 <p>Terminal board</p> <p>Connecting wire</p> <p>(R16968)</p>	
4	Disconnect the connector for the fan motor [S1].	 <p>[S1]</p> <p>(R13499)</p>	

Step	Procedure	Points
5	Disconnect the connector for the swing motors [S41].	
	 <p style="text-align: center;">[S41] (R7935)</p>	
6	Release the harness for the swing motors from the hook.	
	 <p style="text-align: center;">(R7936)</p>	
7	Cut the clamp near the indoor heat exchanger thermistor.	<ul style="list-style-type: none"> ■ Some models have no clamp near the indoor heat exchanger thermistor.
	 <p style="text-align: center;">(R13104)</p>	
8	Pull out the indoor heat exchanger thermistor.	<ul style="list-style-type: none"> ■ The position of the indoor heat exchanger thermistor varies by model. ■ Be careful not to lose the clip of the thermistor.
	<p style="text-align: center;">Indoor heat exchanger thermistor</p>  <p style="text-align: center;">(R7937)</p>	 <p style="text-align: center;">(R11268)</p>

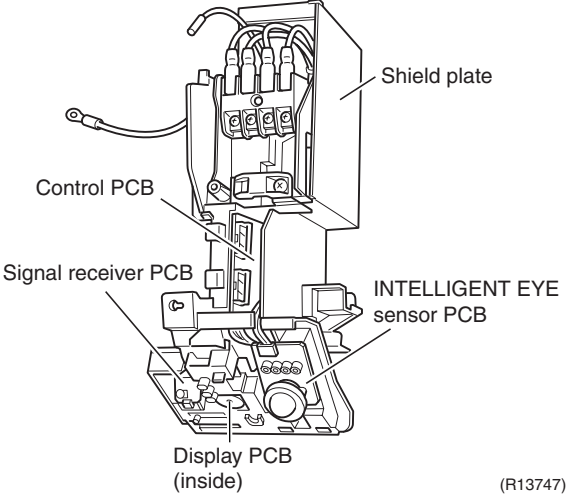
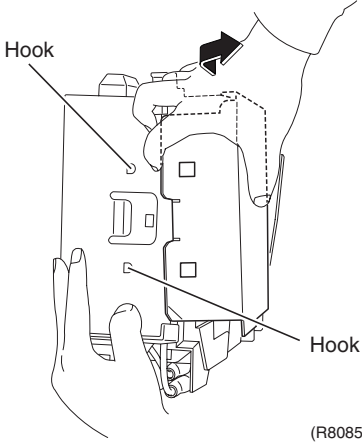
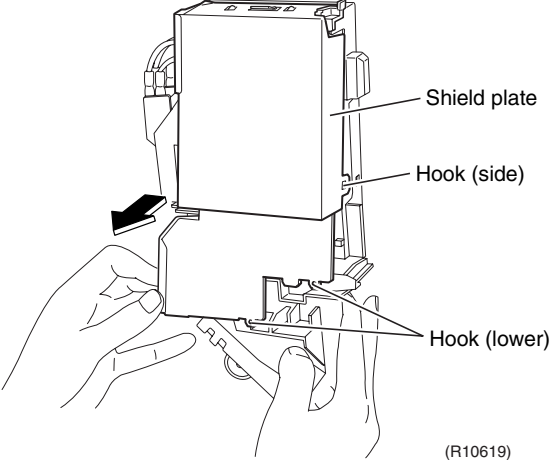
Step	Procedure	Points
9	Remove the screw and detach the earth / ground wire.	
	 <p data-bbox="699 633 1050 663">Earth / ground wire (R16863)</p>	
10	Remove the screw of the electrical box.	
	 <p data-bbox="983 1088 1042 1111">(R3939)</p>	
11	Unfasten the hook at the upper far side by pressing it from above and pulling the electrical box.	
	 <p data-bbox="943 1458 1007 1473">(R8081)</p>	
12	Lift up the electrical box and pull it out.	
	 <p data-bbox="959 1939 1018 1962">(R8082)</p>	<ul style="list-style-type: none"> ■ There is a hook also at the lower part of the back. When reassembling the electrical box, make sure that it is securely fastened.

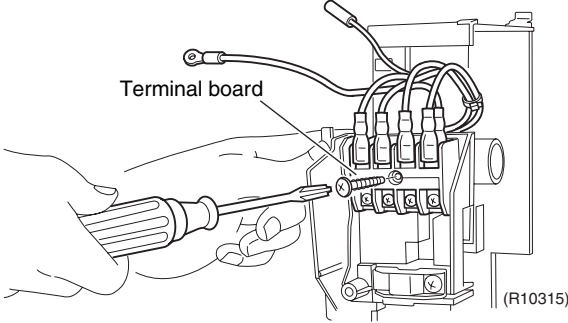
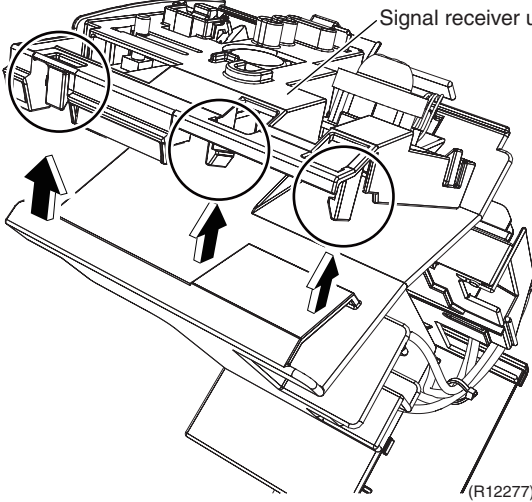
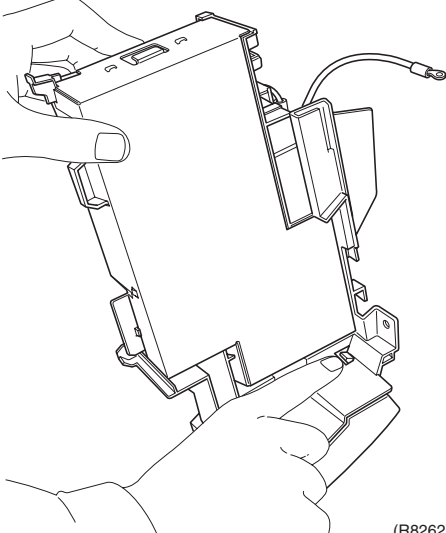
6. Removal of PCBs

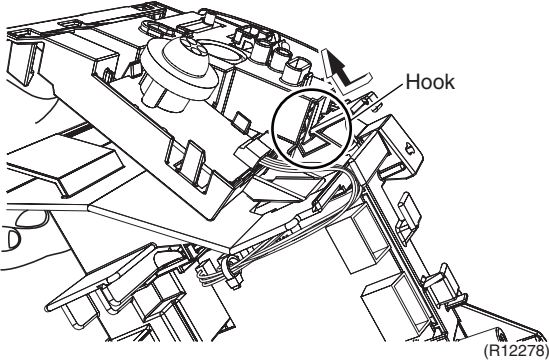
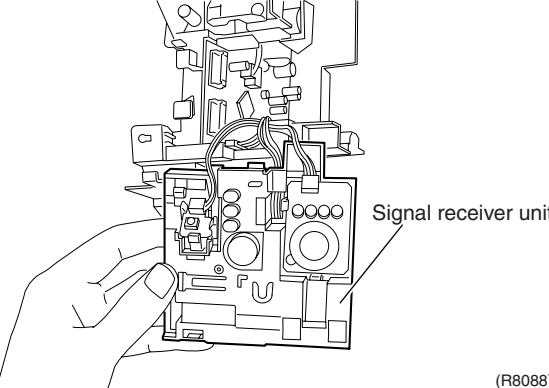
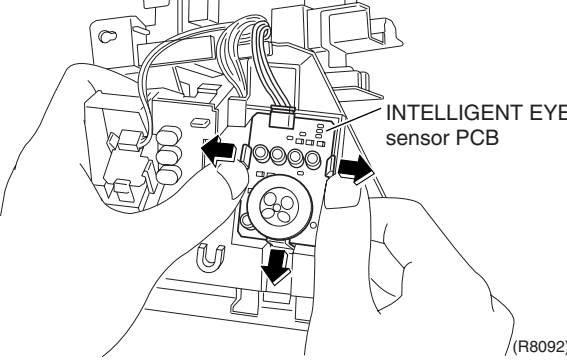
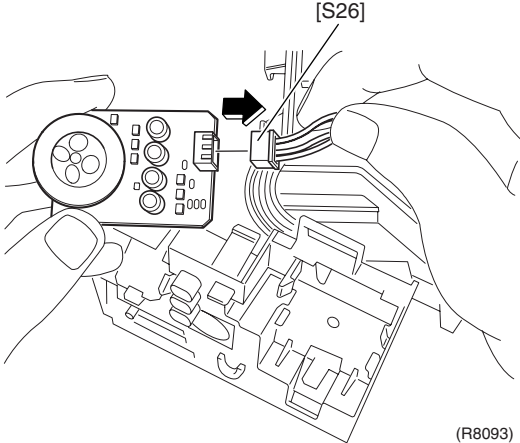
Procedure

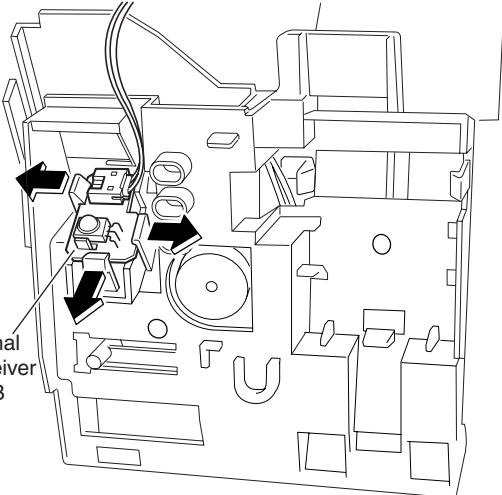
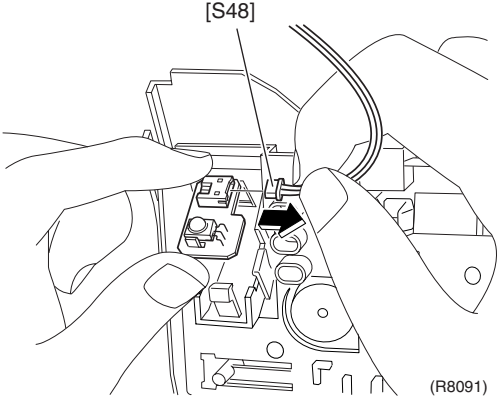
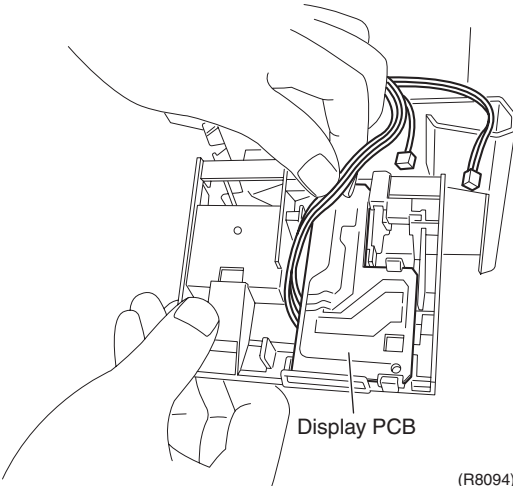


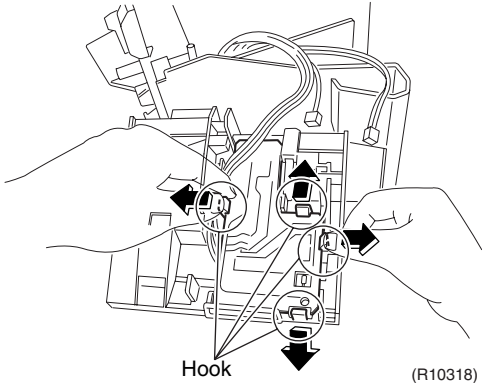
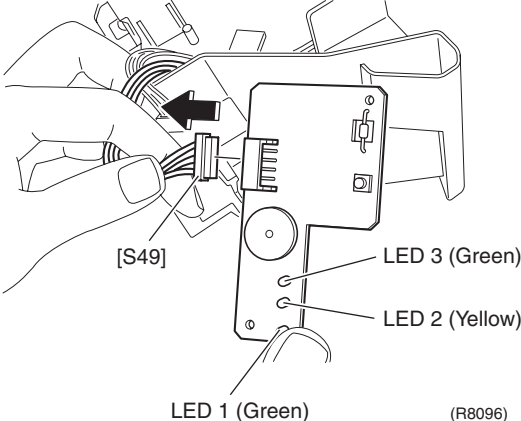
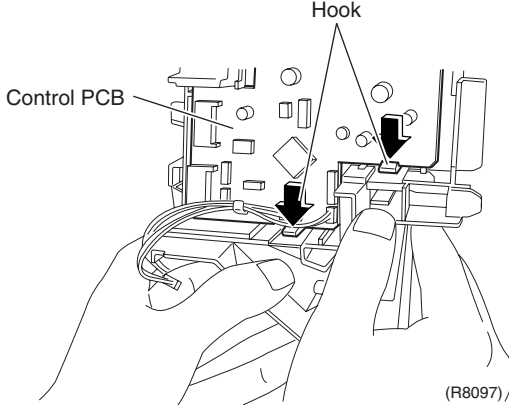
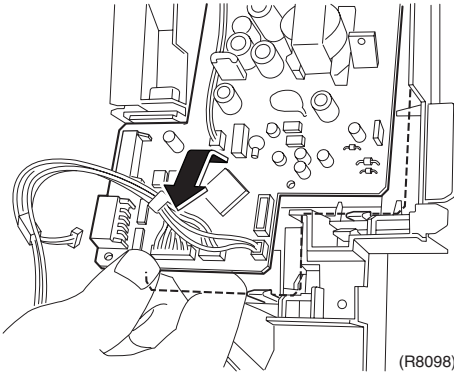
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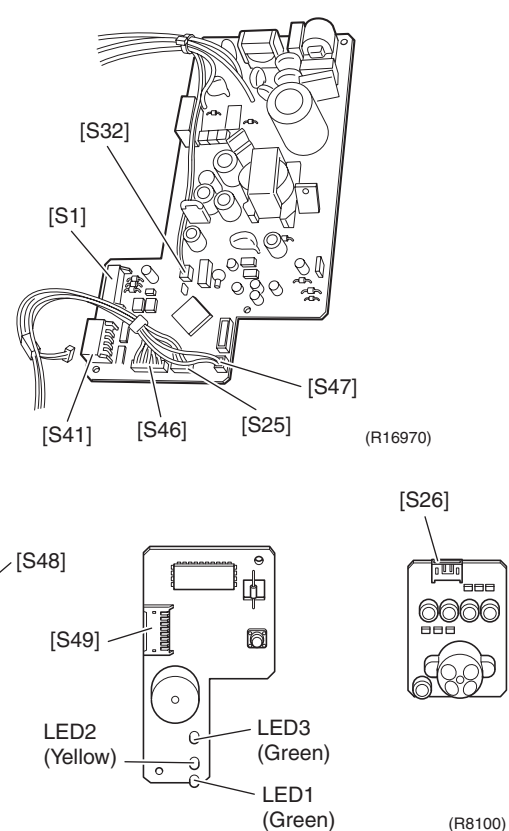
Step	Procedure	Points
<p>1. Remove the shield plate.</p> <p>1 The figure shows the appearance of the electrical box.</p> <p>2 Unfasten the hooks at the upper 2 positions of the shield plate.</p> <p>3 Unfasten the hook at the side of the shield plate.</p> <p>4 Lift up the shield plate to unfasten the lower hooks and remove it.</p>	  	<p>Preparation</p> <ul style="list-style-type: none"> Remove the electrical box according to the “Removal of Electrical Box”.

Step	Procedure	Points
2. Remove the terminal board.	<p data-bbox="199 280 464 376">1 Remove the screw and remove the terminal board.</p>  <p data-bbox="1002 533 1070 555">(R10315)</p>	
3. Remove the signal receiver unit.	<p data-bbox="199 651 448 678">1 Unfasten the 3 hooks.</p>  <p data-bbox="963 1093 1034 1115">(R12277)</p> <p data-bbox="199 1133 448 1256">2 Unfasten the hook on the opposite side, and lift up the signal receiver unit.</p>  <p data-bbox="948 1686 1007 1709">(R8262)</p>	

Step	Procedure	Points
3	<p>Remove the signal receiver unit.</p>  <p>Hook</p>  <p>Signal receiver unit</p> <p>(R12276)</p> <p>(R8088)</p>	
4.	<p>Remove the INTELLIGENT EYE sensor PCB.</p> <p>1 Unfasten the 3 hooks and remove the INTELLIGENT EYE sensor PCB.</p>  <p>INTELLIGENT EYE sensor PCB</p> <p>(R8092)</p> <p>2 Disconnect the connector [S26] from the INTELLIGENT EYE sensor PCB.</p>  <p>[S26]</p> <p>(R8093)</p>	

Step	Procedure	Points
<p>5. Remove the signal receiver PCB.</p> <p>1</p>	<p>Unfasten the 3 hooks and remove the signal receiver PCB.</p>  <p>Signal receiver PCB</p> <p>(R8090)</p> <p>2</p> <p>Disconnect the connector [S48] from the signal receiver PCB.</p>  <p>[S48]</p> <p>(R8091)</p>	
<p>6. Remove the display PCB.</p> <p>1</p>	<p>The figure shows the connection of the wire harness for the display PCB.</p>  <p>Display PCB</p> <p>(R8094)</p>	<ul style="list-style-type: none"> ■ The display PCB is positioned on the rear side of the signal receiver unit.

Step	Procedure	Points
<p>2 Unfasten the 4 hooks and remove the display PCB.</p> <p>3 Disconnect the connector [S49] from the display PCB.</p>	 	
<p>7. Remove the control PCB.</p> <p>1 Unfasten the lower 2 hooks of the control PCB.</p> <p>2 Lift up the bottom of the control PCB and pull it out.</p>	 	<p>■ The control PCB is also fixed by 2 upper hooks. When reassembling, be sure to fit all the 4 hooks.</p>

Step		Procedure	Points
3	The figures show the names of the PCB component parts.	 <p>The diagram shows a top-down view of a PCB assembly with various components labeled [S1] through [S49]. [S1] is a DC fan motor, [S25] is an INTELLIGENT EYE sensor PCB, [S26] is a control PCB, [S32] is an indoor heat exchanger thermistor, [S41] are swing motors, [S46] is a display PCB, [S47] is a signal receiver PCB, [S48] is a control PCB, and [S49] is another control PCB. Below the main assembly, three LEDs are shown: LED2 (Yellow), LED3 (Green), and LED1 (Green). Reference numbers (R16970) and (R8100) are also present.</p>	<p>[S1]: DC fan motor [S25]: INTELLIGENT EYE sensor PCB [S26]: control PCB [S32]: indoor heat exchanger thermistor [S41]: swing motors [S46]: display PCB [S47]: signal receiver PCB [S48]: control PCB [S49]: control PCB</p>

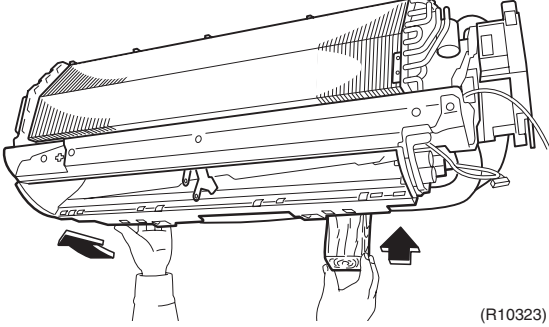
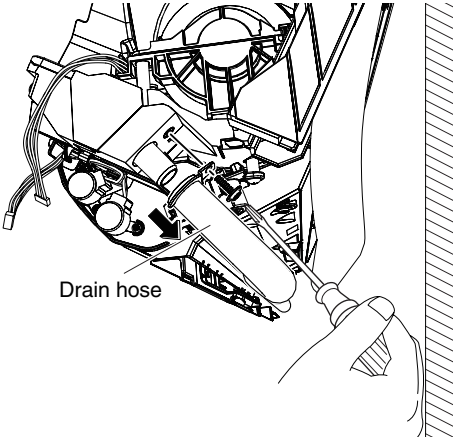
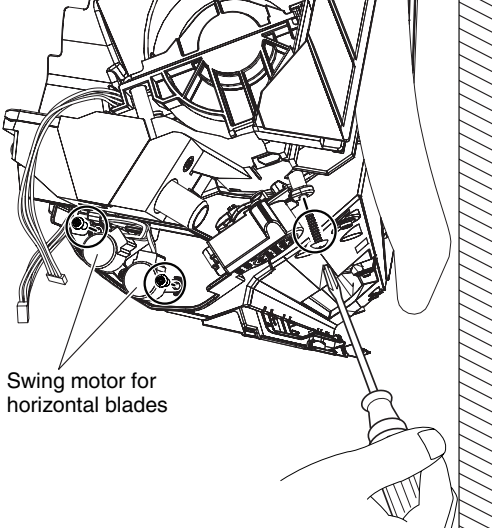
7. Removal of Swing Motors

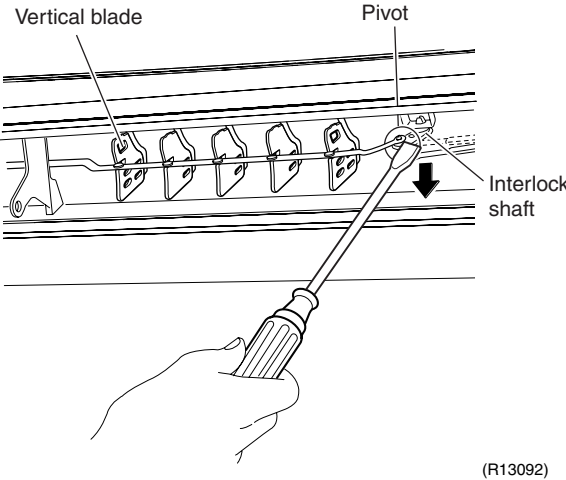
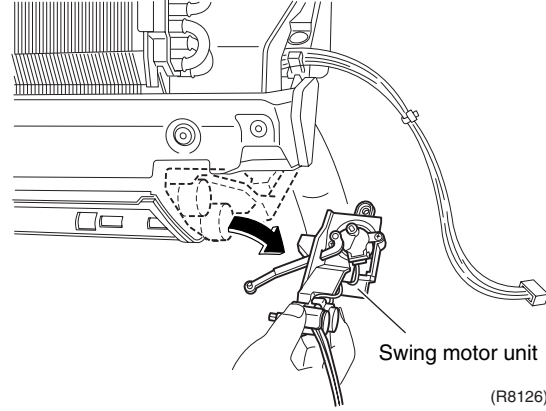
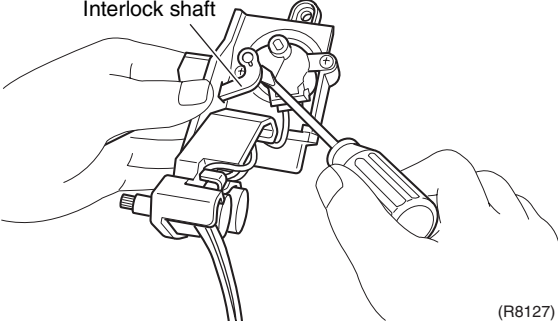
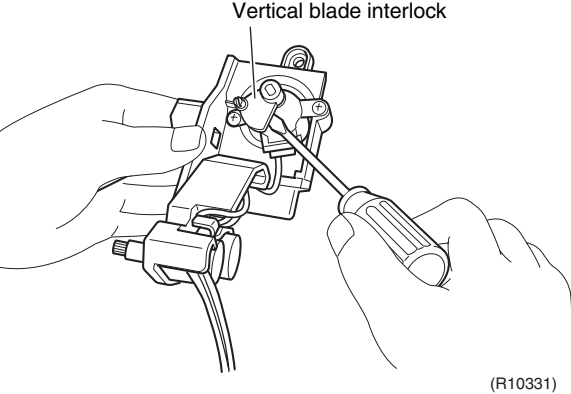
Procedure

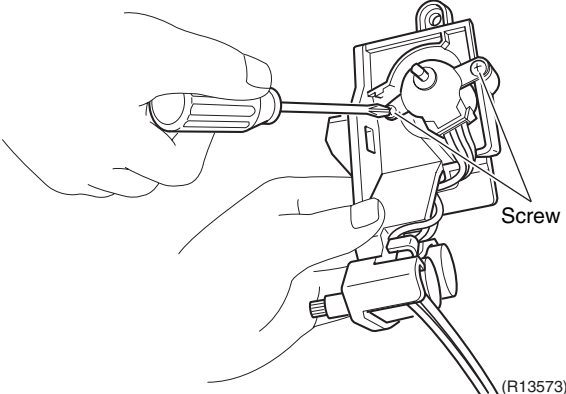
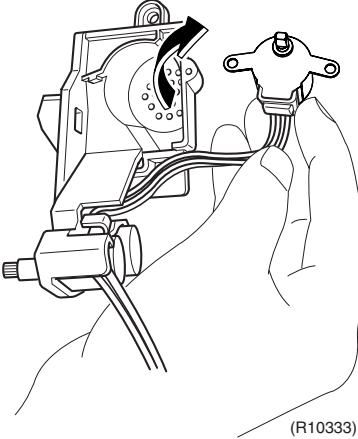
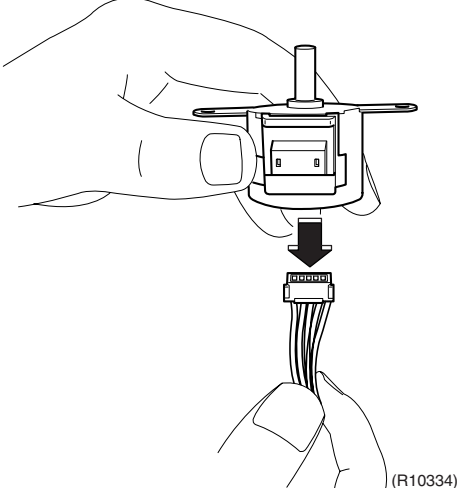


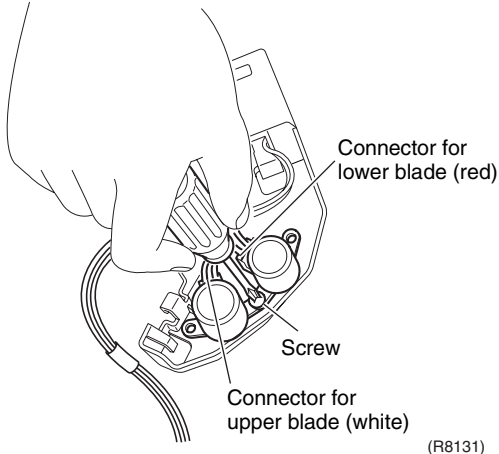
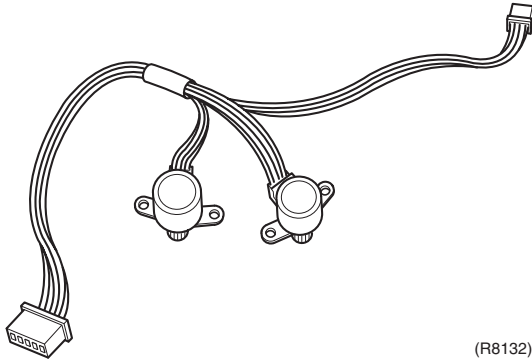
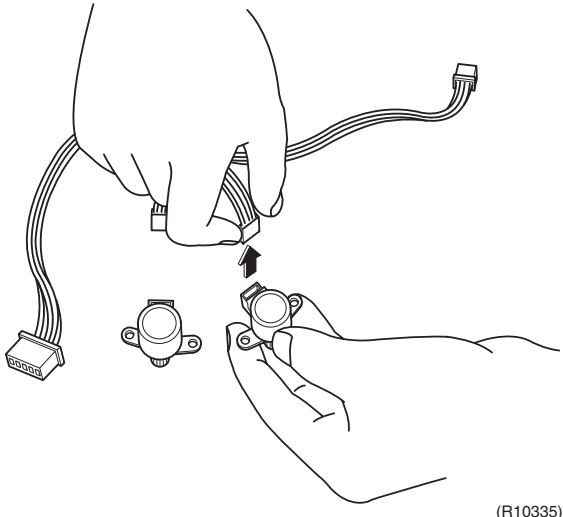
Warning

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

Step	Procedure	Points
1.	Remove the swing motor for vertical blades.	
1	Lift the indoor unit with a wooden base.	 <p>(R10323)</p>
2	Remove the screw behind the drain hose, and disconnect the drain hose.	 <p>Drain hose</p> <p>(R10329)</p>
3	Remove the screw at the rear, and remove the screws on the right and the left side of the swing motors for horizontal blades.	 <p>Swing motor for horizontal blades</p> <p>(R13748)</p>

Step	Procedure	Points
4	Detach the pivot from the interlock shaft for vertical blades with a flat screwdriver.	
		
5	Remove the swing motor unit.	
		
6	Detach the interlock shaft from the swing motor with a flat screwdriver.	
		
7	Remove the vertical blade interlock with a flat screwdriver.	
		

Step	Procedure	Points
8	Remove the 2 screws.	
	 <p>(R13573)</p>	
9	Remove the swing motor for vertical blades.	
	 <p>(R10333)</p>	
10	Disconnect the connector.	■ Connector: green
	 <p>(R10334)</p>	

Step	Procedure	Points
2.	<p data-bbox="199 215 467 275">Remove the swing motors for horizontal blades.</p> <p data-bbox="199 286 467 409">1 Remove the screw and remove the swing motors for horizontal blades.</p> <p data-bbox="199 1144 467 1238">2 Disconnect the harnesses from the motors.</p>   	<p data-bbox="1107 226 1166 282">!</p> <p data-bbox="1182 244 1281 275">Caution</p> <p data-bbox="1091 280 1457 409">When reassembling, do not confuse the installing order of the 2 motors and the colors of the connectors.</p> <p data-bbox="1091 414 1457 573">If you set the connectors or motors opposite, the horizontal blades do not move smoothly or noise may be heard.</p> <p data-bbox="1091 577 1457 837"> (1) Set the swing motor for the upper blade first. (connector: white) (2) Then, set the swing motor for the lower blade. (connector: red) (3) Fix both swing motors with a screw. </p>

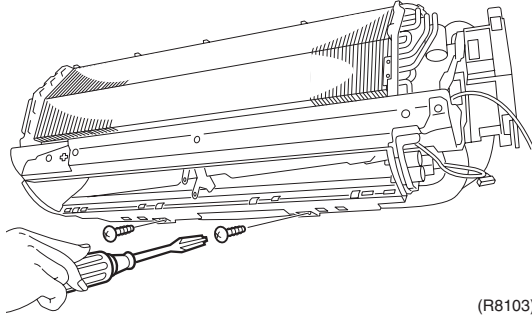
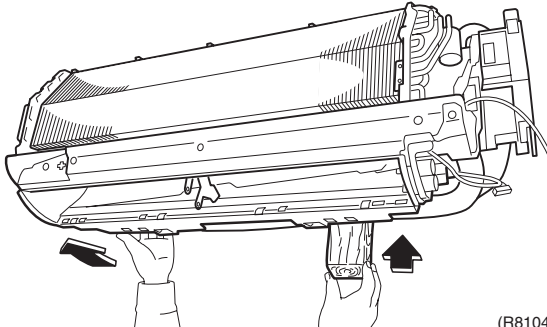
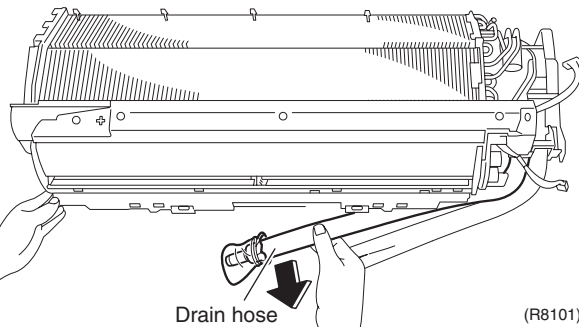
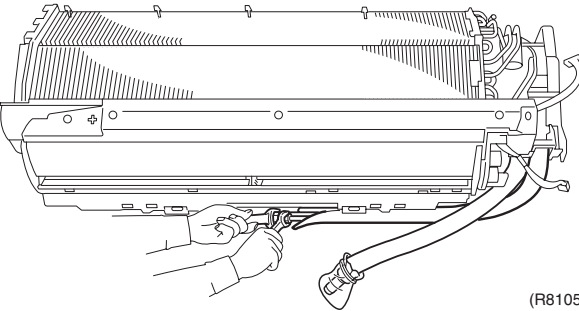
8. Removal of Indoor Heat Exchanger

Procedure

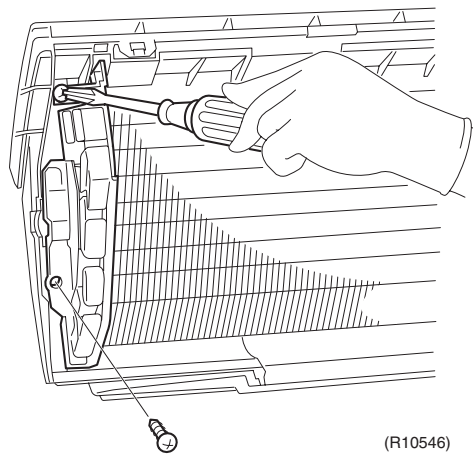
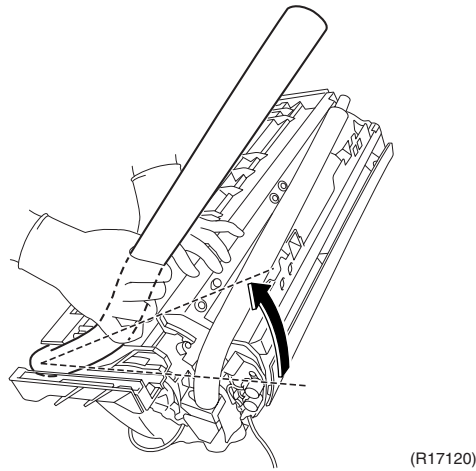
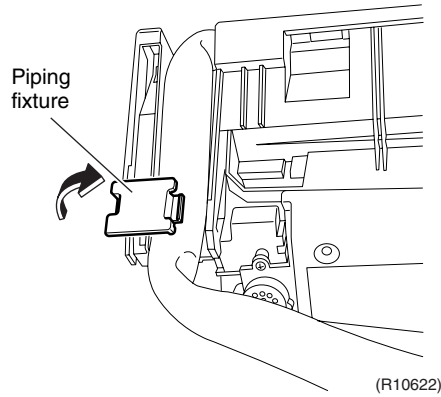


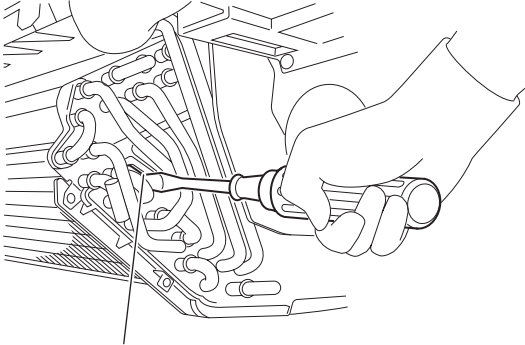
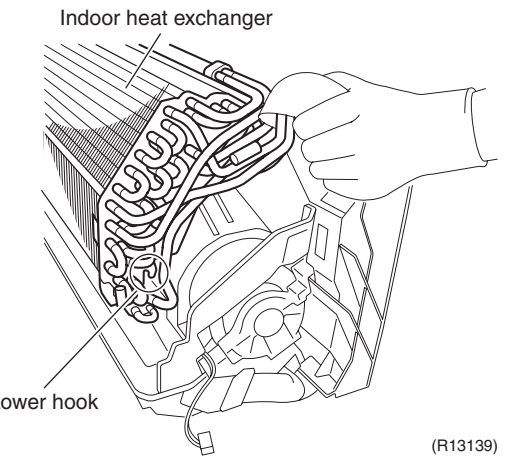
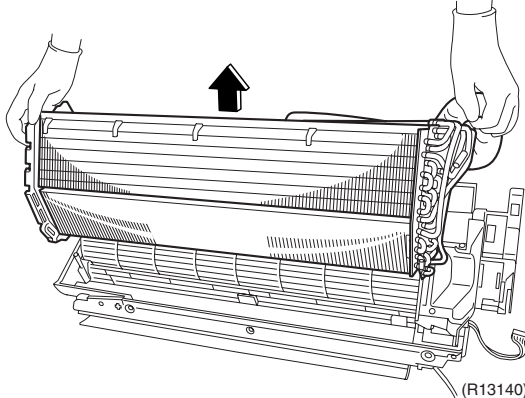
Warning

Be sure to wait for 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".
1	<p>Remove the screws which fix the indoor heat exchanger to the installation plate.</p>  <p>(R8103)</p>	<p>Caution</p> <p>If the refrigerant leaks, repair the leakage, then collect all refrigerant from the unit. After conducting vacuum drying, recharge the proper amount of refrigerant.</p>
2	<p>Lift the indoor unit with a wooden base.</p>  <p>(R8104)</p>	<p>Caution</p> <p>From the viewpoint of global environment protection, be sure to use a vacuum pump for air purging.</p>
3	<p>Lift up the indoor unit slightly and pull out the drain hose. (The illustration is for the case of left piping.)</p>  <p>Drain hose (R8101)</p>	<p>Caution</p> <p>In pump-down work, be sure to stop the compressor before disconnecting the refrigerant piping. If the refrigerant piping 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>
4	<p>Disconnect the gas piping and the liquid piping.</p>  <p>(R8105)</p>	<ul style="list-style-type: none"> Place a plastic sheet under the drain pan to prevent from wetting the floor with the remaining drain. If the drain hose is embedded in the wall, disconnect the drain hose beforehand. Carry out the removal work with 2 wrenches. When the pipings are disconnected, protect both the openings of pipe and unit from entering moisture.

Step	Procedure	Points
2.	Remove the indoor heat exchanger.	
1	Detach the indoor unit from the installation plate.	
2	Unfasten the hook of the piping fixture at the back of the indoor unit. Remove the piping fixture.	
3	Slightly widen the auxiliary piping.	
4	Remove the 2 screws on the left side.	<p>⚠ Caution When removing or reassembling the indoor heat exchanger, be sure to wear gloves or wrap the indoor heat exchanger with cloth. (You may be injured by the fins.)</p>



Step	Procedure	Points
5	<p>Unfasten the upper hook on the right side with a flat screwdriver.</p>  <p>Upper hook (R13138)</p>	
6	<p>After unfastening the lower hooks, lift up the indoor heat exchanger by its right side.</p>  <p>Indoor heat exchanger Lower hook (R13139)</p>	<ul style="list-style-type: none"> When reassembling the indoor heat exchanger, make sure that the right hooks (upper and lower) are fastened.
7	<p>Remove the indoor heat exchanger.</p>  <p>(R13140)</p>	

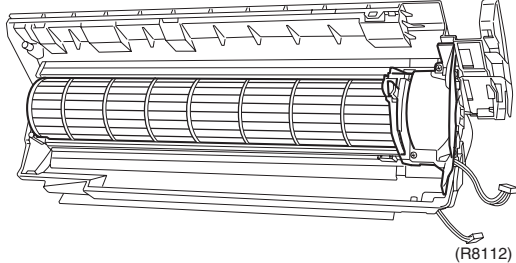
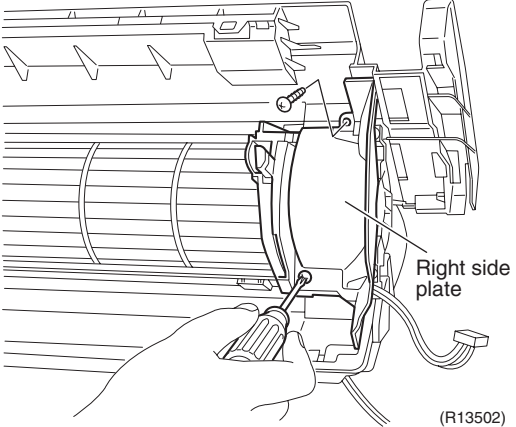
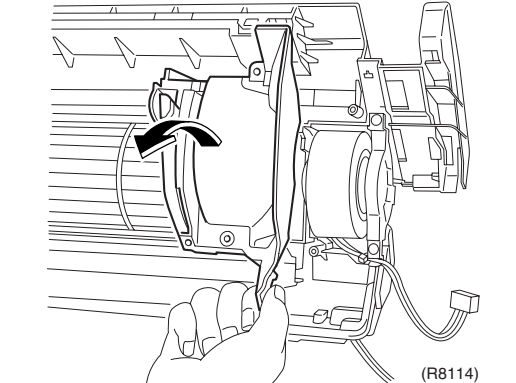
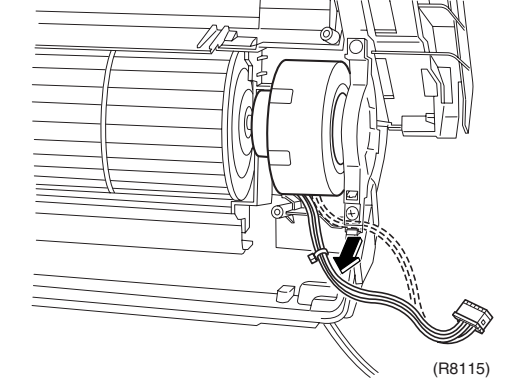
9. Removal of Fan Motor

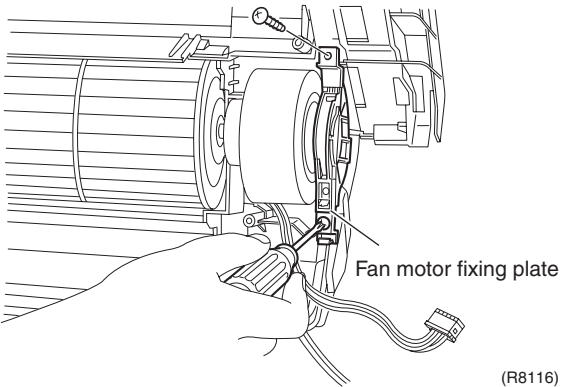
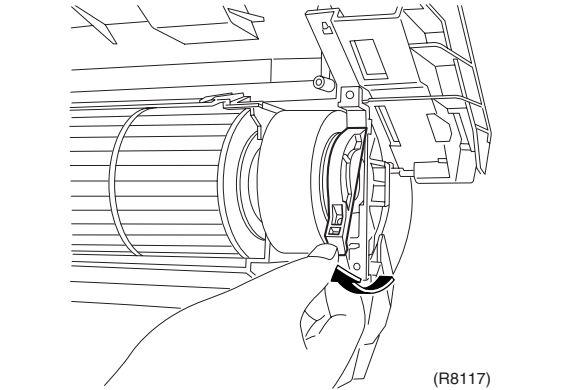
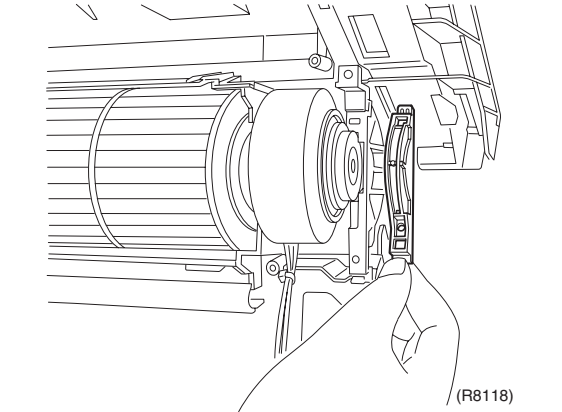
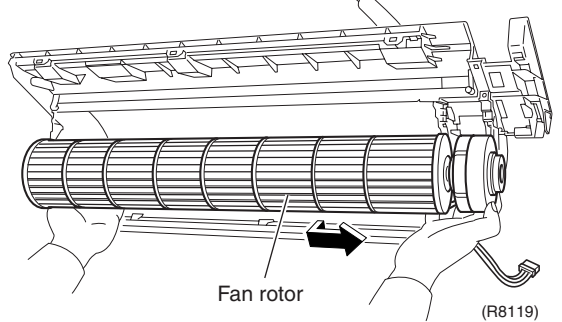
Procedure

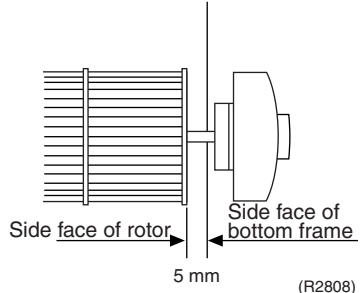
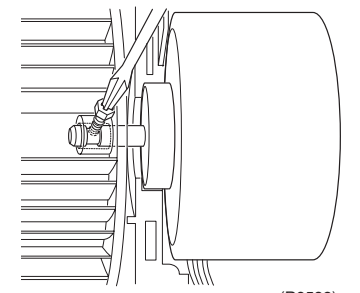
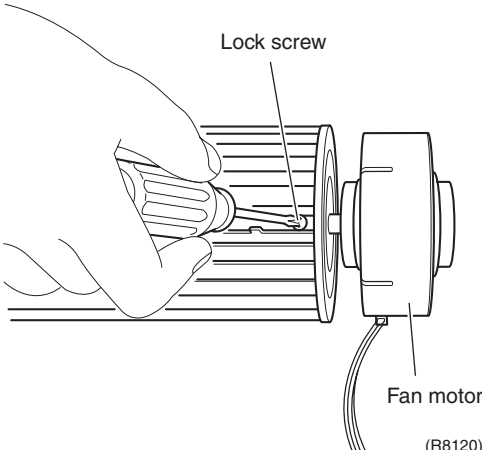
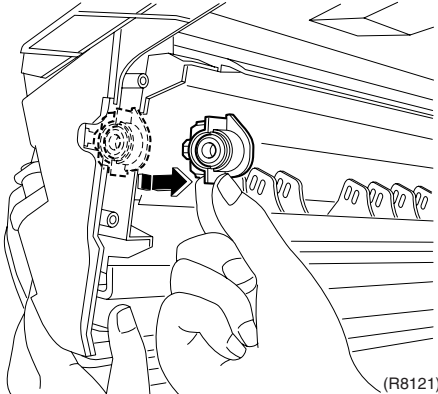
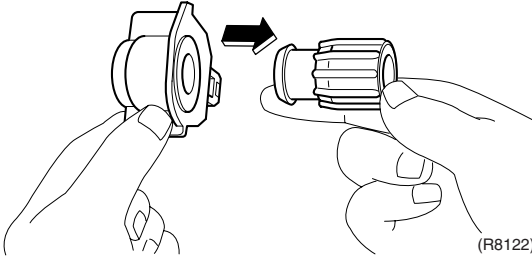


Warning

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

Step	Procedure	Points
1. Remove the right side plate.	 <p>(R8112)</p>	<p>Preparation</p> <ul style="list-style-type: none"> Remove the indoor heat exchanger according to the "Removal of Indoor Heat Exchanger".
1 Remove the 2 screws and remove the right side plate.	 <p>(R13502)</p>	
2 Release the fan motor wire harness from the hook.	 <p>(R8114)</p>  <p>(R8115)</p>	

Step	Procedure	Points
3	Remove the 2 screws of the fan motor fixing plate.	
4	Unfasten the hook of the fan motor fixing plate and remove the plate.	
 <p style="text-align: right;">(R8116)</p>		
 <p style="text-align: right;">(R8117)</p>  <p style="text-align: right;">(R8118)</p>		
2. Remove the fan motor.		
1	Dislocate the fan rotor by sliding it to the right.	
 <p style="text-align: right;">(R8119)</p>		

Step	Procedure	Points
2	Loosen the lock screw and 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.
3	Press the bearing ASSY from outside.	 <p>(R2808)</p>
4	Remove the bearing.	 <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 give the screw one more turn. (3) Rotate 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).
	 <p>(R8120)</p>	
	 <p>(R8121)</p>	
	 <p>(R8122)</p>	

Revision History

Month / Year	Version	Revised contents
06 / 2013	Si04-852	First edition

Warning



- Daikin products are manufactured for export to numerous countries throughout the world. Prior to purchase, please confirm with your local authorised importer, distributor and/or retailer whether this product conforms to the applicable standards, and is suitable for use, in the region where the product will be used. This statement does not purport to exclude, restrict or modify the application of any local legislation.
- Ask a qualified installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Use only those parts and accessories supplied or specified by Daikin. Ask a qualified installer or contractor to install those parts and accessories. Use of unauthorised parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Read the User's Manual carefully before using this product. The User's Manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

If you have any enquiries, please contact your local importer, distributor and/or retailer.

Cautions on product corrosion

1. Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced.
2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided. If you need to install the outdoor unit close to the sea shore, contact your local distributor.

Dealer

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