




REMOVAL PROCEDURE



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

2.0/2.5/3.0/3.5 kW Class

-  Indoor Unit
-  Inverter
-  Wall Mounted Type



Service Manual Removal Procedure

Indoor Unit

●Cooling Only

**FTK20GV1B
FTK25GV1B
FTK35GV1B**

**FTK20GVLT
FTK25GVLT
FTK30GVLT**

●Heat Pump

**ATX20GV1B
ATX25GV1B
ATX35GV1B**

**FTX20GV1B
FTX25GV1B
FTX35GV1B**

**FTX20GVLT
FTX25GVLT
FTX30GVLT**

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Note:

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

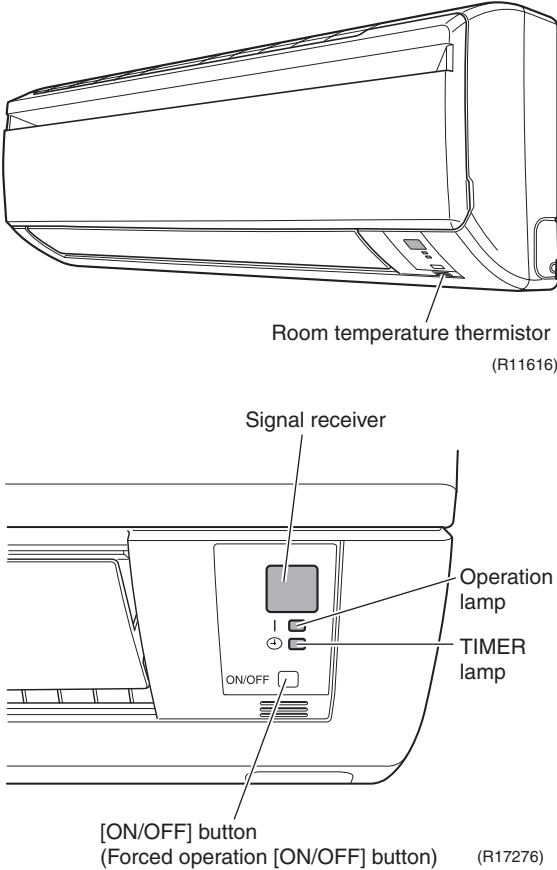
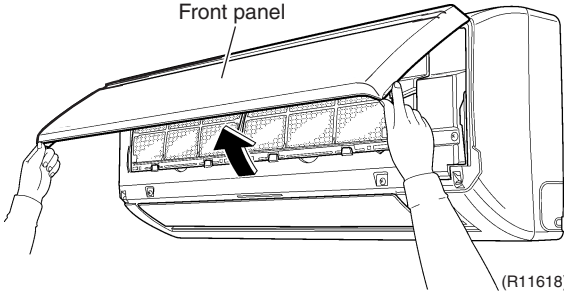
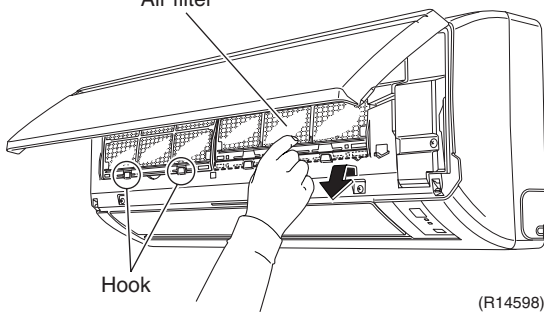
1. Removal of Air Filters

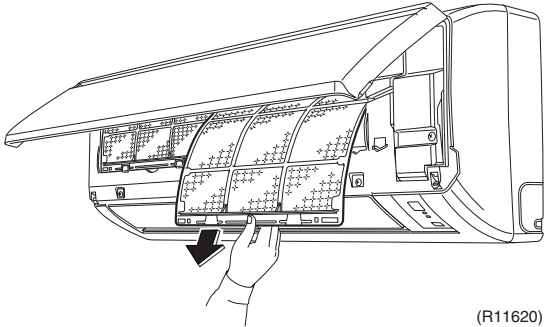
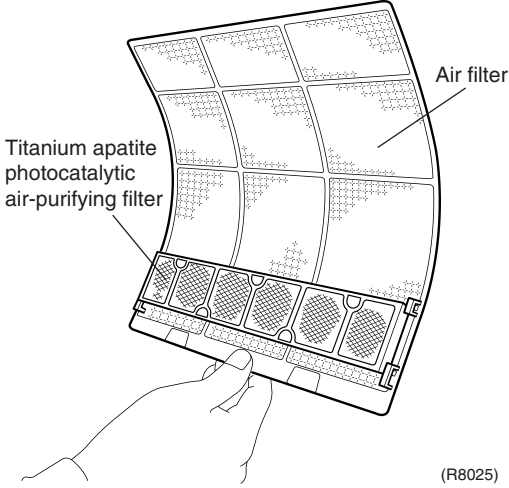
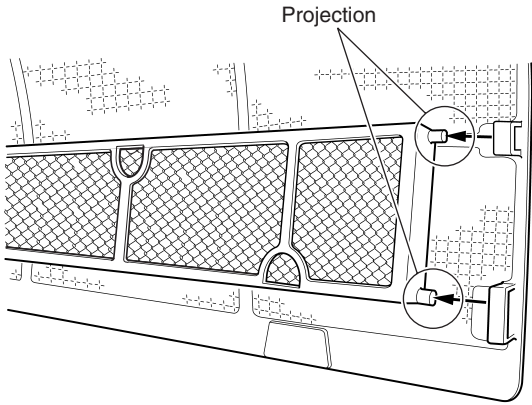
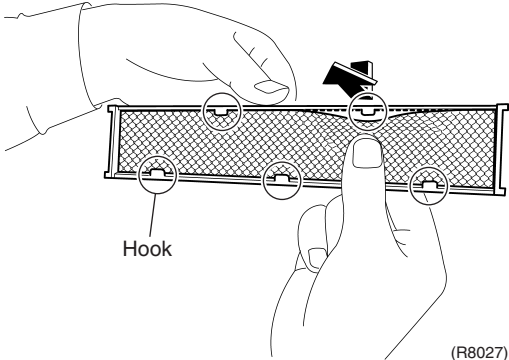
Procedure



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 a signal from the remote controller is received, the receiving tone sounds and the operation lamp flickers 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 of the air filter to unfasten the 2 hooks.</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.

Step	Procedure	Points
3	<p>Pull out the air filter downward and remove it.</p>  <p>(R11620)</p>	
3.	<p>Remove the Titanium apatite photocatalytic air-purifying filters.</p>	
1	<p>The Titanium apatite photocatalytic air-purifying filter is attached to the back of the air filter.</p>  <p>(R8025)</p>	
2	<p>Remove the Titanium apatite photocatalytic air-purifying filter frame by bending the air filter and unfastening the projections from the air filter frame.</p>  <p>(R14599)</p>	
3	<p>Remove the Titanium apatite photocatalytic air-purifying filter from its frame (at 5 positions) by bending it.</p>  <p>(R8027)</p>	<ul style="list-style-type: none"> ■ To prevent the damage, do not remove the Titanium apatite photocatalytic air-purifying filter from the frame when cleaning it. ■ The Titanium apatite photocatalytic air-purifying filter is not marked for difference between the right and left sides.

2. Removal of Horizontal Blade

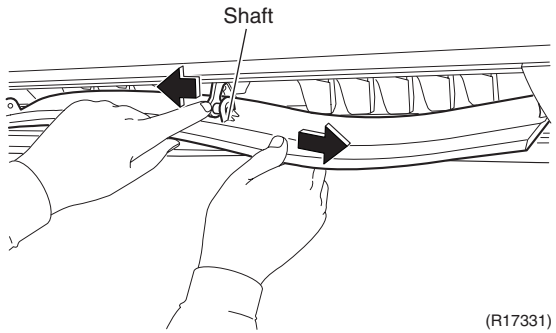
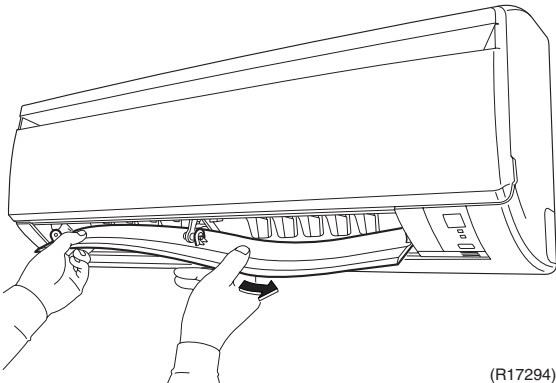
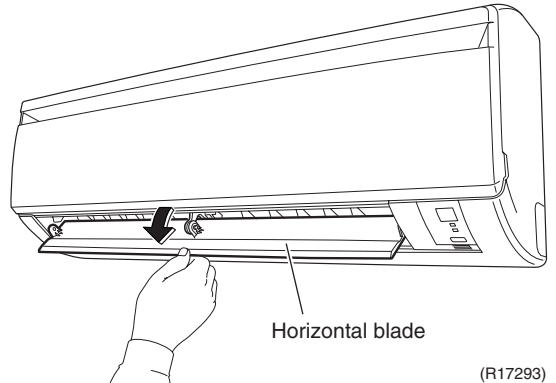
Procedure



Warning

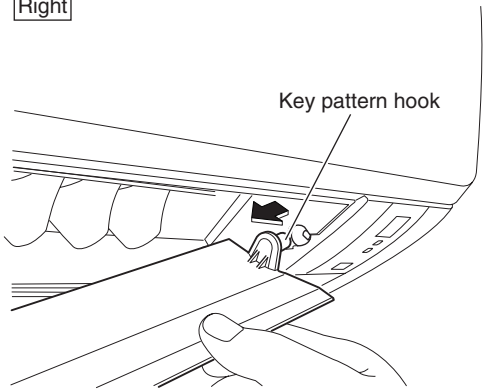
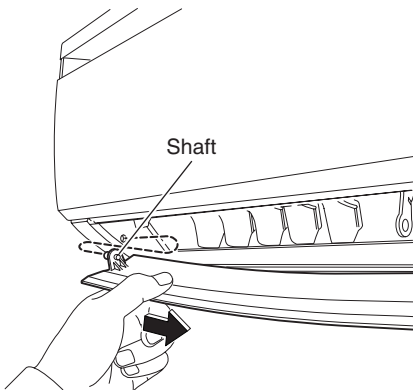
Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1	Open the horizontal blade.	
2	Unfasten the center shaft while bending the horizontal blade slightly.	<ul style="list-style-type: none"> ■ The center shaft can be released easily by bending the blade.
3	Unfasten the left shaft of the horizontal blade.	<p>Cautions for reassembling</p> <ol style="list-style-type: none"> 1. Since the key pattern hook is provided, rotate the horizontal blade and fit it to the right shaft first. 2. Fit the horizontal blade to the center and left shafts.
4	Unfasten the right shaft of the horizontal blade.	

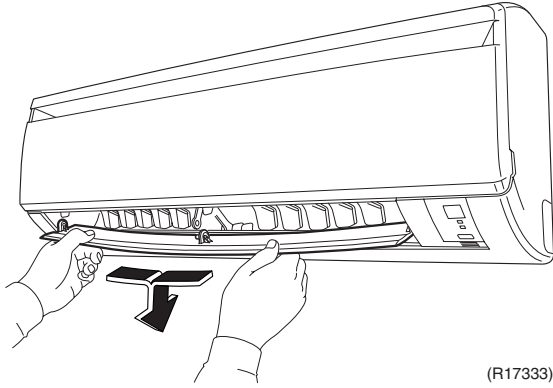


Left

Right



(R17332)

Step	Procedure	Points
5	<p data-bbox="201 215 464 275">Remove the horizontal blade.</p>  <p data-bbox="991 622 1062 645">(R17333)</p>	

3. 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	Open the front panel over the position where it stops.	<p>(R11627)</p>	
2	Release the right rotary shaft.	<p>(R11628)</p>	<ul style="list-style-type: none"> ■ The rotary shaft on each side can be released easily by sliding each shaft inward.
3	Release the left rotary shaft.	<p>(R11629)</p>	
4	Remove the front panel.	<p>(R11630)</p>	<ul style="list-style-type: none"> ■ When reassembling the front panel, fit the right and left rotary shafts one by one into the grooves and fully push them in position.

4. Removal of Front Grille

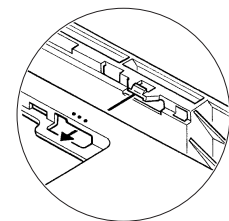
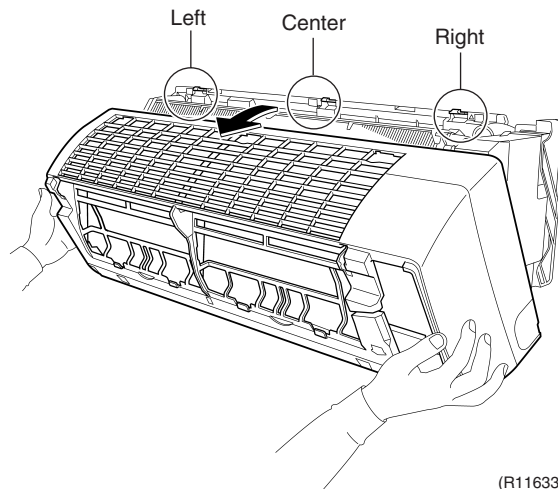
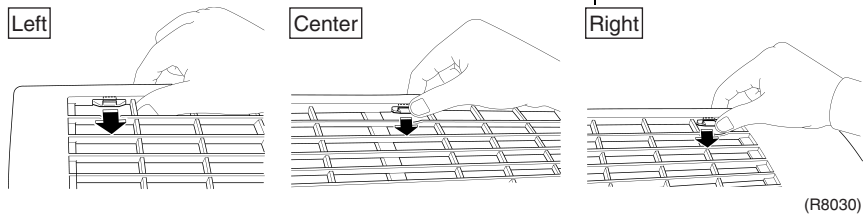
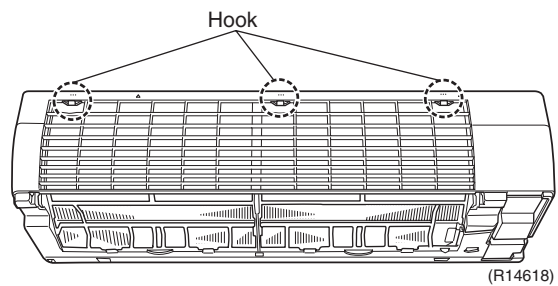
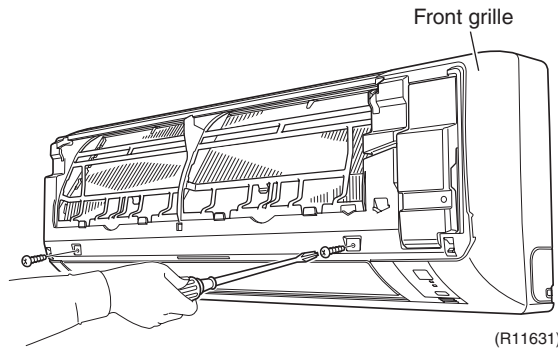
Procedure



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 2 screws, which fix the front grille to the main body.	Preparation <ul style="list-style-type: none"> Remove the front panel according to the "Removal of Front Panel".
2	The front grille has 3 hooks on the upper part.	<ul style="list-style-type: none"> Refer to the removal procedure in a reverse way when reassembling.
3	Press each hook, and also lift the grille up to unfasten the hooks.	<ul style="list-style-type: none"> The convex marks (...) on the front panel indicate the position of the hooks.
4	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.



5. Removal of Electrical Box / Vertical Blades

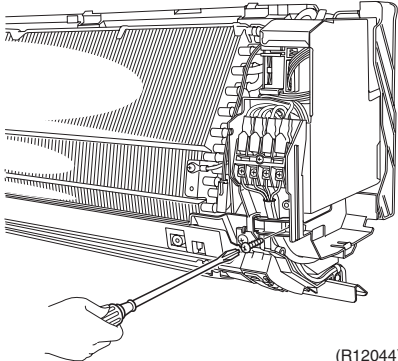
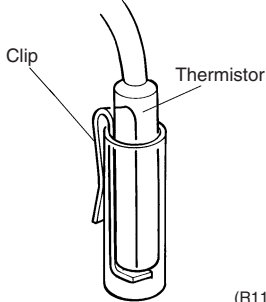
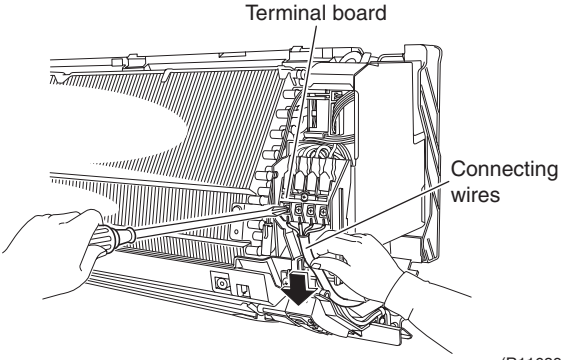
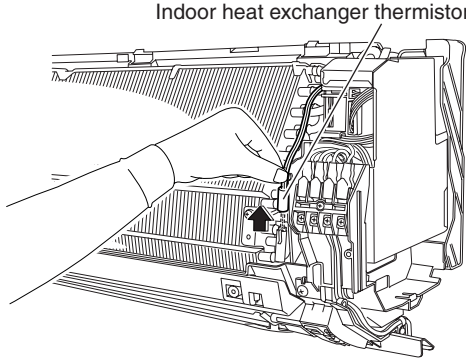
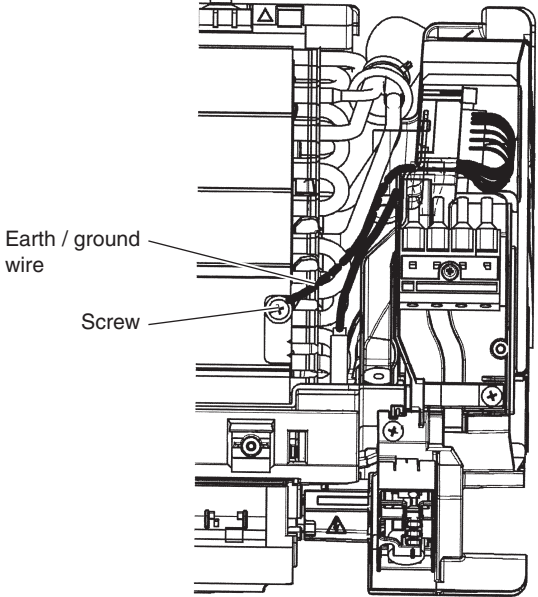
Procedure

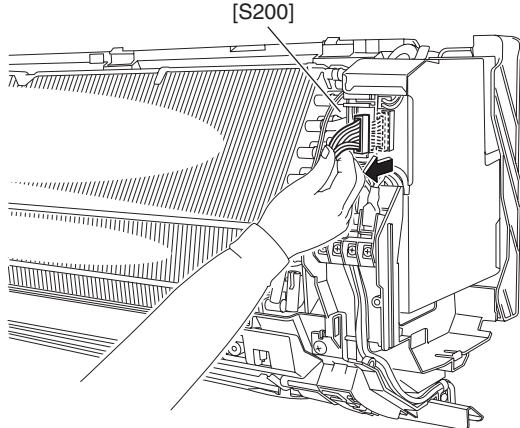
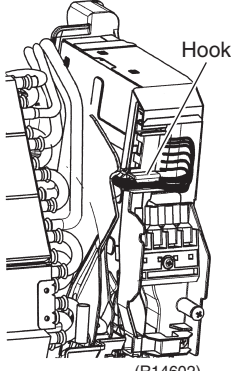
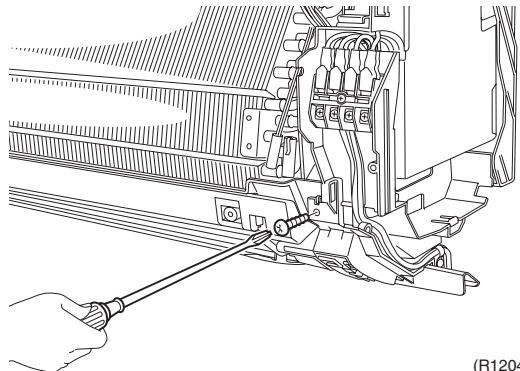
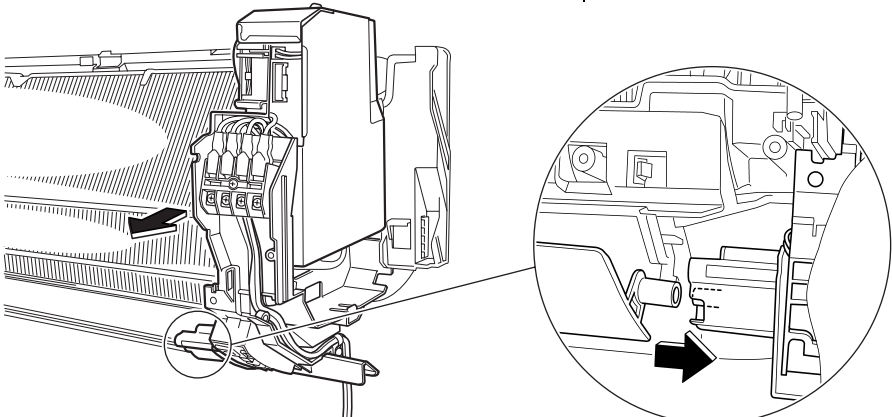
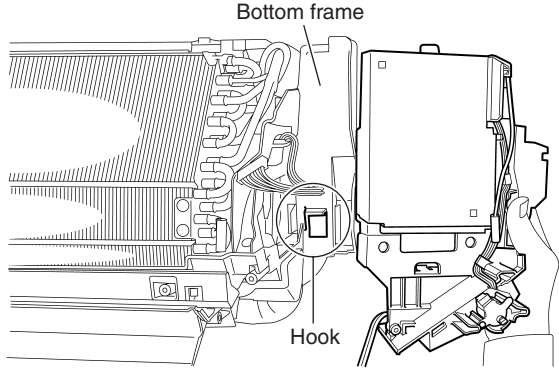


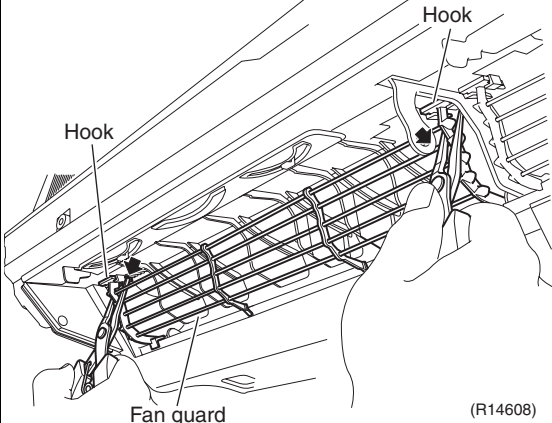
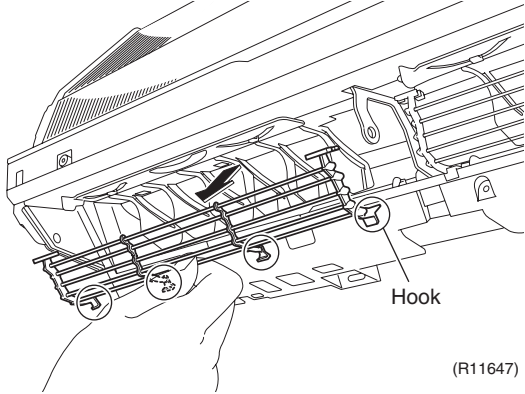
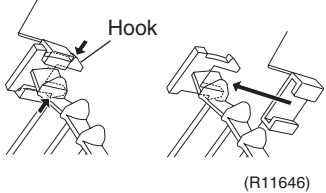
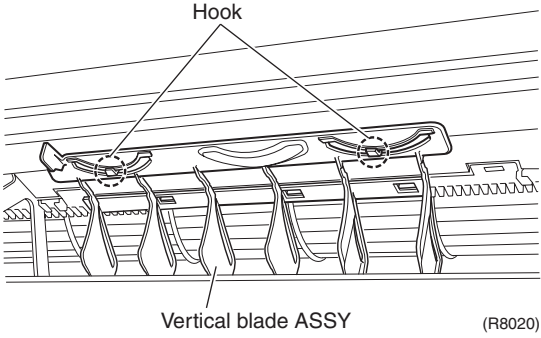
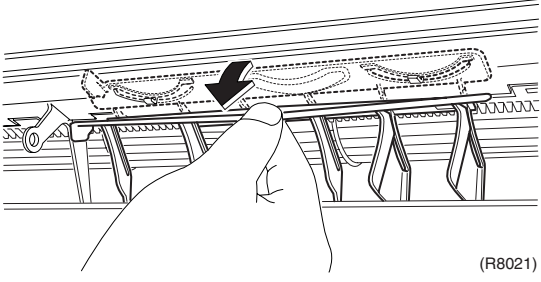
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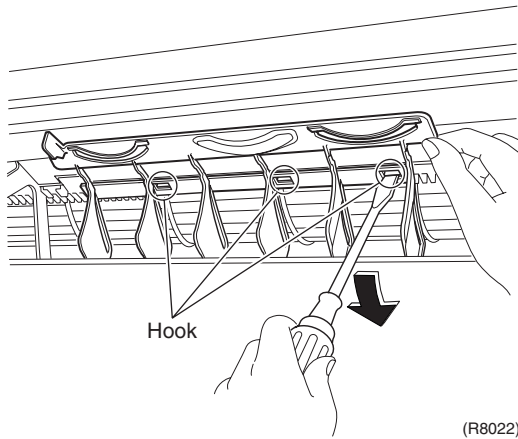
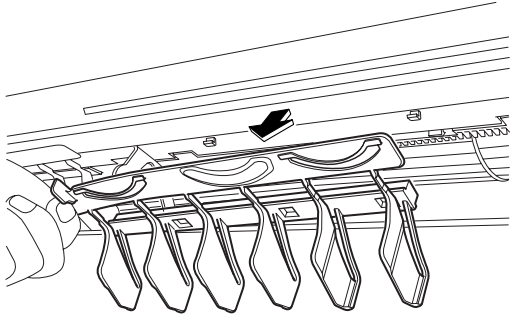
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Step	Procedure	Points
1. Disconnect the connecting wires.	<p style="text-align: center;">Service cover</p> <p style="text-align: right;">(R14600)</p>	<p>Preparation</p> <ul style="list-style-type: none"> Remove the front grille according to the "Removal of Front Grille".
2. Pull out the service cover down in the direction of the arrow.	<p style="text-align: right;">(R12042)</p>	
3. The figure shows the connections of wire harnesses.	<p style="text-align: center;">Terminal board Electrical box</p> <p style="text-align: center;">Indoor heat exchanger thermistor</p> <p style="text-align: center;">Wire retaining plate</p> <p style="text-align: right;">(R14586)</p>	

Step	Procedure	Procedure	Points
4	Remove the screw of the wire retaining plate.	 <p>(R12044)</p>	<p>■ Connecting wires black (1) ----- power supply white (2) ----- power supply red (3) ----- transmission yellow / green (±) ----- earth / ground</p> <p>■ Take care not to lose the clip of thermistor.</p>  <p>(R11268)</p>
5	Remove the screws of the terminal board and disconnect the connecting wires.	 <p>(R11639)</p>	
6	Pull out the indoor heat exchanger thermistor.	 <p>(R12045)</p>	
2. Remove the electrical box.		 <p>(R17334)</p>	
1	Remove the screw and release the earth / ground wire.		

Step	Procedure	Points
2	<p>Disconnect the connector for the fan motor [S200]. Release the fan motor harnesses from the hook.</p>  <p>(R15844)</p>	 <p>(R14602)</p>
3	<p>Remove the screw of the electrical box.</p>  <p>(R12048)</p>	
4	<p>Slide the electrical box to the right first and detach the horizontal blade from the electrical box.</p>  <p>(R15845)</p>	
5	<p>Pull the electrical box.</p>  <p>(R11657)</p>	<ul style="list-style-type: none"> There is a hook on the bottom frame. When reassembling, fit the rear side of the electrical box to the hook.

Step	Procedure	Points
3. Remove the fan guard.	<p data-bbox="156 248 459 344">1 Unfasten the right and left hooks of the fan guard with pliers.</p>  <p data-bbox="156 667 472 763">2 Unfasten the 4 hooks at the bottom. Remove the fan guard.</p> 	<ul style="list-style-type: none"> <li data-bbox="1098 215 1410 275">■ Narrow the edges of the hook to unfasten it.  <ul style="list-style-type: none"> <li data-bbox="1098 667 1455 763">■ Repeat the same procedure to remove the fan guard on the other side.
4. Remove the vertical blade ASSY.	<p data-bbox="156 1160 459 1220">1 Unfasten the hooks at the upper 2 positions.</p>  	<ul style="list-style-type: none"> <li data-bbox="1098 1088 1455 1184">■ A vertical blade ASSY has 6 fins. It is impossible to replace only one fin. <li data-bbox="1098 1189 1442 1285">■ The vertical blade ASSY is not marked for difference between right and left.

Step	Procedure	Points
2	<p data-bbox="201 215 472 342">Unfasten the 3 hooks at the shaft mounting part by pressing them with a flat screwdriver.</p>  <p data-bbox="986 667 1043 685">(R8022)</p>	
3	<p data-bbox="201 703 432 768">Remove the vertical blade ASSY.</p>  <p data-bbox="986 1081 1043 1099">(R8023)</p>	<ul style="list-style-type: none"> <li data-bbox="1098 703 1453 801">■ Repeat the same procedure to remove the vertical blade ASSY on the other side.

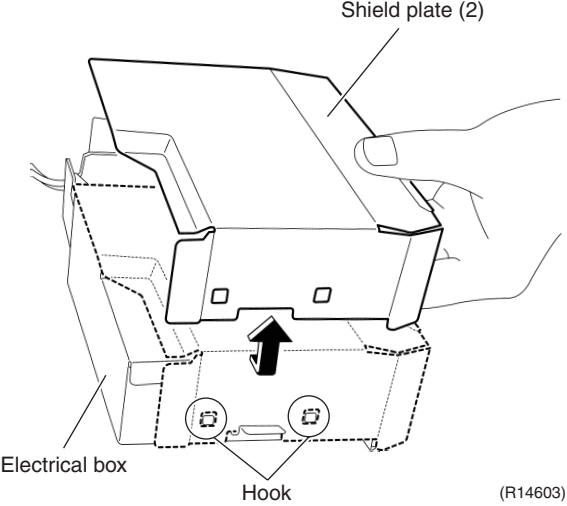
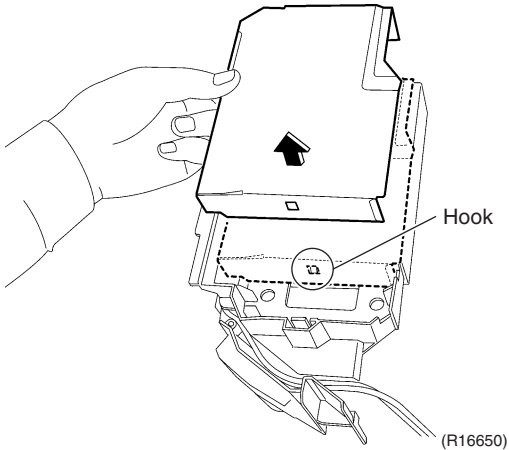
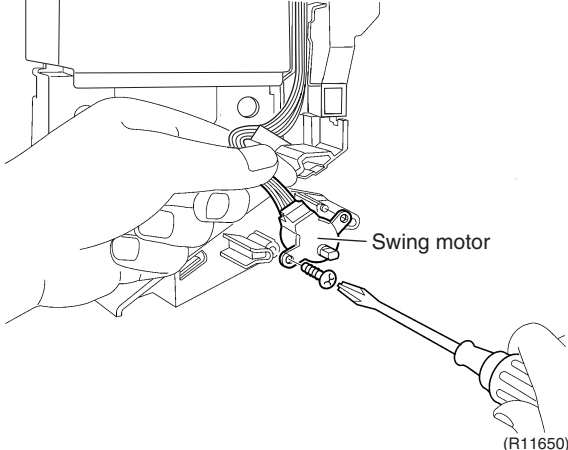
6. Removal of Swing Motor / PCBs

Procedure

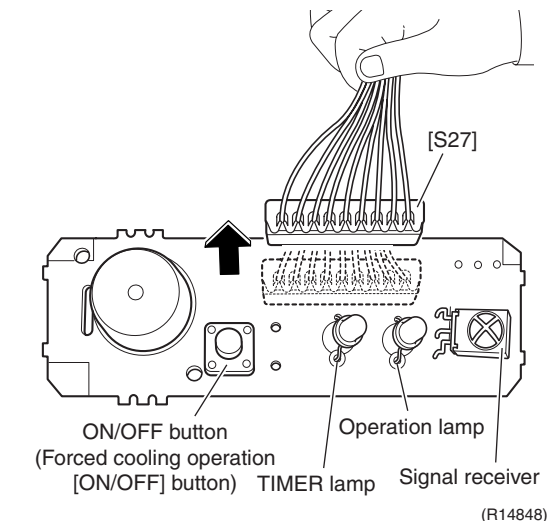
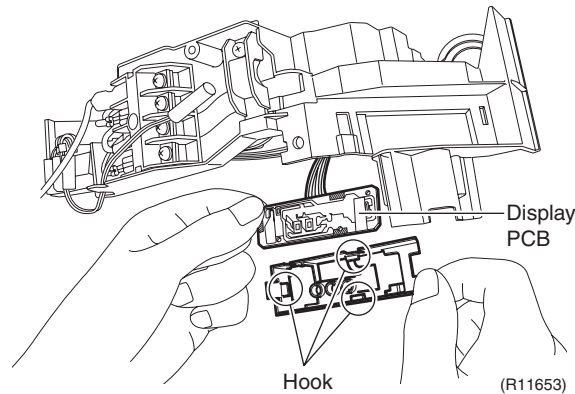
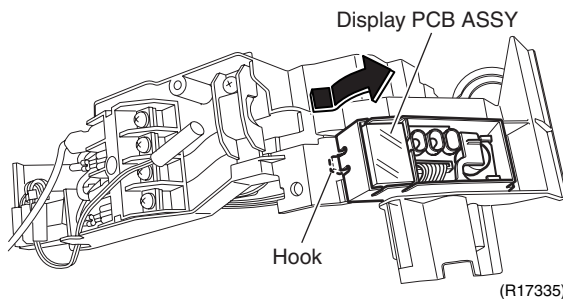
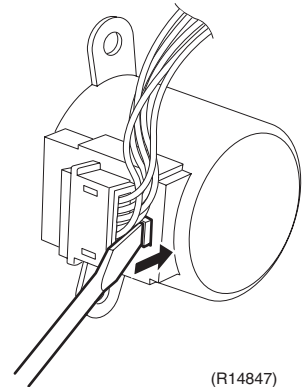
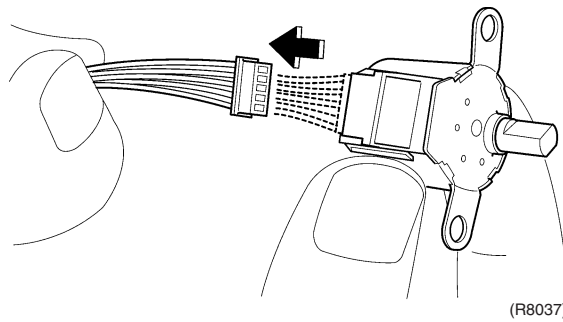


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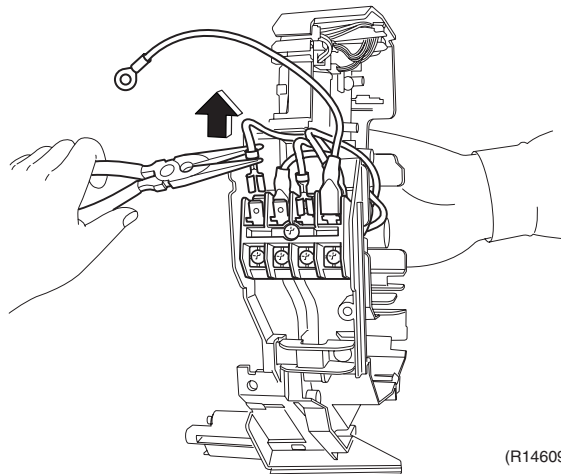
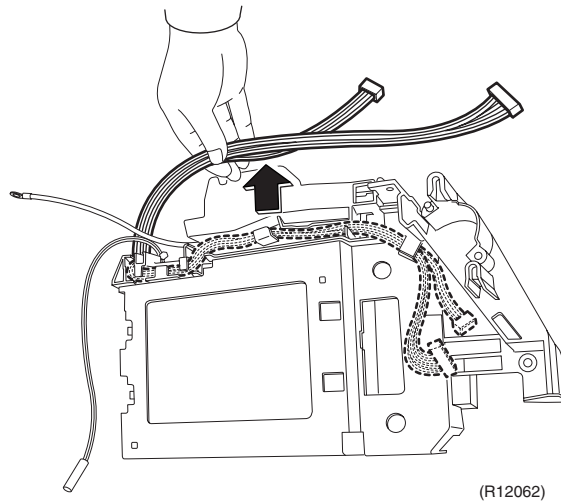
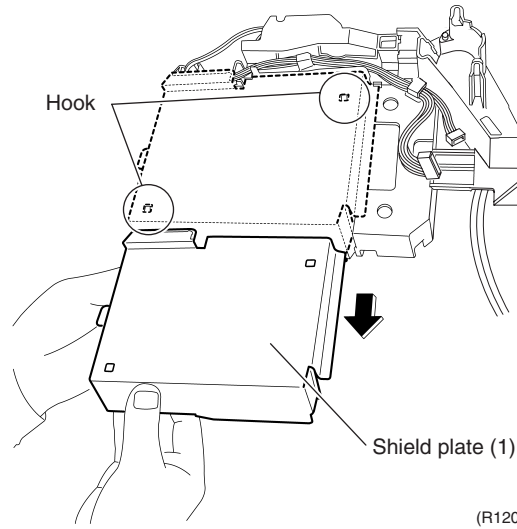
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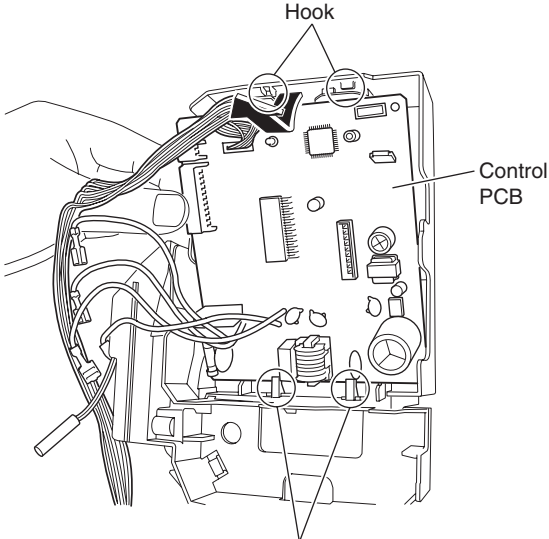
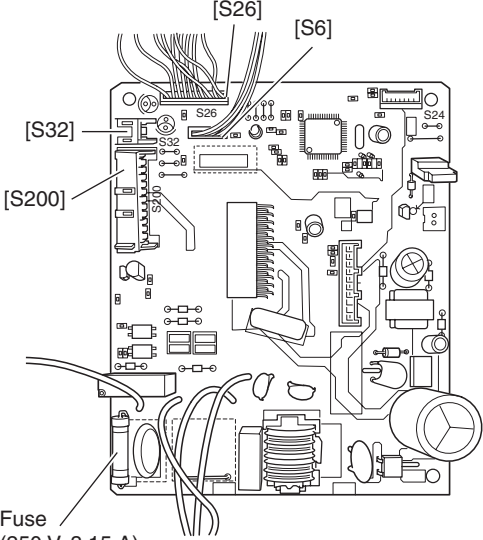
Step	Procedure	Points
1. Remove the shield plate (2).	<p data-bbox="199 450 472 539">1 Unfasten the hooks at the upper 2 positions of the shield plate (2).</p>  <p data-bbox="199 936 472 1061">2 Unfasten the hook at the lower position, and remove the shield plate (2).</p> 	<p data-bbox="1093 376 1241 405">Preparation</p> <ul data-bbox="1093 412 1437 539" style="list-style-type: none"> ■ Remove the electrical box according to the "Removal of Electrical Box / Vertical Blades".
2. Remove the swing motor.	<p data-bbox="199 1509 472 1570">1 Remove the screw of the swing motor.</p> 	

Step	Procedure	Points
2	Unfasten the hook, and disconnect the connector.	<ul style="list-style-type: none"> ■ The connector of the swing motor has a hook. Press the hook with a flat screwdriver to unfasten it.
3. Remove the display PCB.		
1	Unfasten the hook, and release the display PCB ASSY.	
2	Turn over the display PCB ASSY, and unfasten the 3 hooks to remove the display PCB.	
3	Disconnect the connector [S27] from the display PCB.	
4	The figure shows the component parts of the display PCB.	[S27]: for control PCB



Step	Procedure	Points
4. Remove the control PCB.		
1	Lift the shield plate (1) and unfasten the 2 hooks.	
2	Slide the shield plate (1) and remove it.	
3	Release the harnesses from the hooks.	
4	Disconnect the terminals from the terminal board with pliers.	



Step	Procedure	Points
5	<p>Unfasten the 4 hooks. Lift up the upper part of the control PCB and remove it.</p>  <p style="text-align: right;">(R11943)</p>	
6	<p>The figure shows the control PCB.</p>  <p style="text-align: right;">(R19132)</p>	<p>[S6]: swing motor [S26]: display PCB [S32]: indoor heat exchanger thermistor [S200]: fan motor</p>

7. Removal of Indoor Heat Exchanger

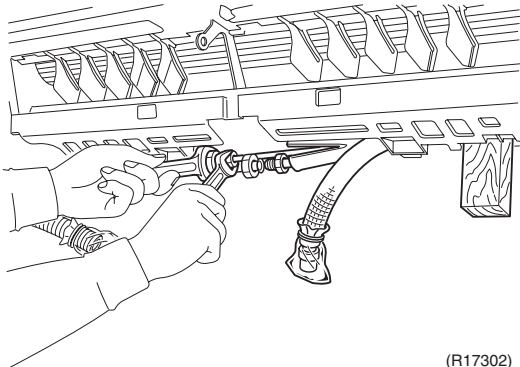
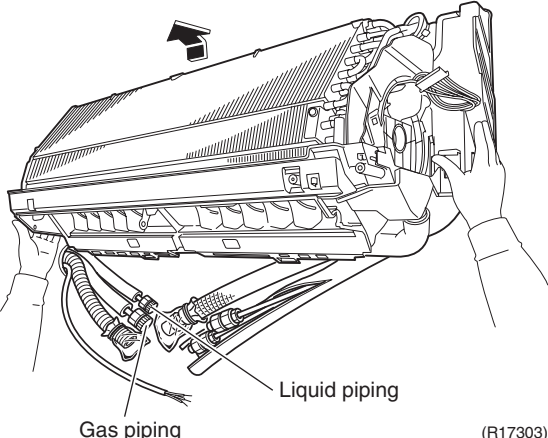
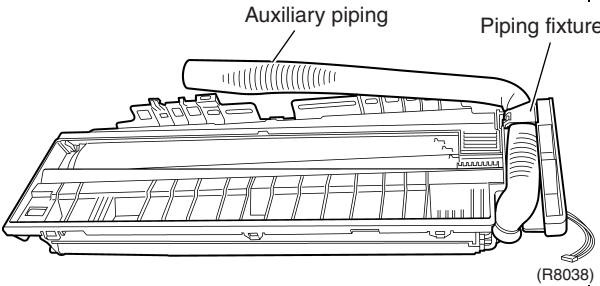
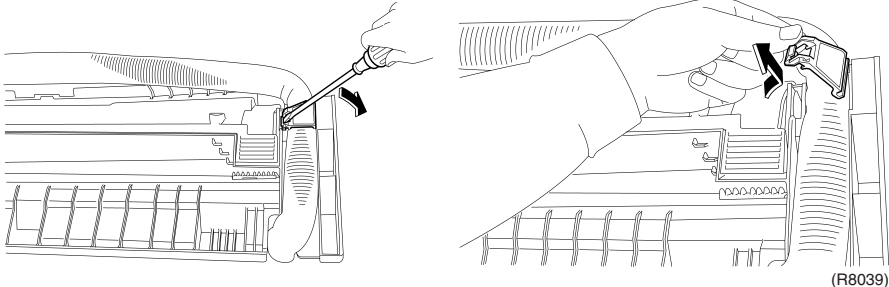
Procedure

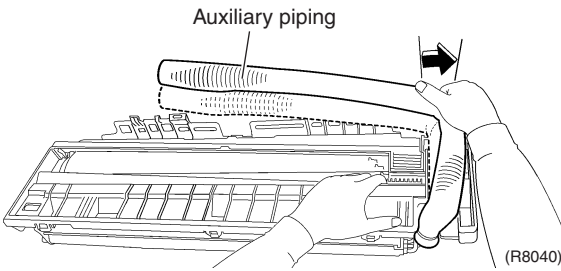
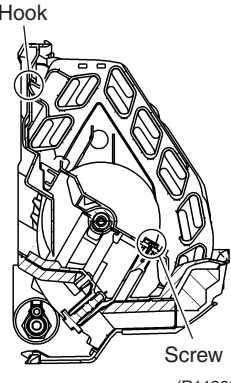
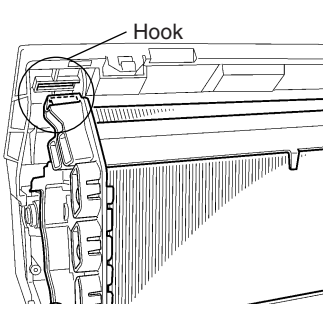
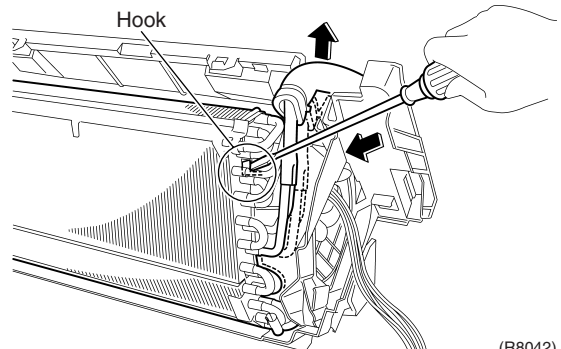
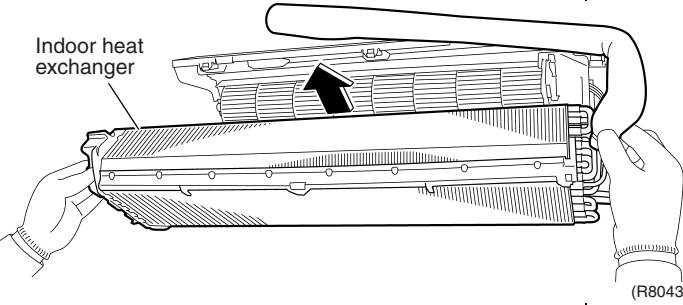


Warning

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>(R17298)</p>	<p>Preparation</p> <ul style="list-style-type: none"> Remove the electrical box according to the "Removal of Electrical Box / Vertical Blades".
1 Remove the screws which fix the indoor unit to the installation plate.	<p>Wooden base</p> <p>(R17299)</p>	<p>Caution</p> <p>Be sure to stop the compressor before disconnecting the refrigerant pipe. If the refrigerant pipe is disconnected with the compressor running and the stop valve opened, air may be sucked in to generate an over-pressure in the refrigeration cycle, thus resulting in pipe rupture or accidental injury.</p>
2 Lift the indoor unit with a wooden base.	<p>Drain hose</p> <p>Extension drain hose</p> <p>Connecting wires</p> <p>(R17300)</p>	<ul style="list-style-type: none"> If the drain hose is embedded in the wall, disconnect the drain hose beforehand.
3 Pull out the drain hose.	<p>(R17301)</p>	<ul style="list-style-type: none"> Place a plastic sheet under the drain hose as remaining drain may leak.
4 Disconnect the flare nut for gas piping.		<ul style="list-style-type: none"> Carry out the removal work with 2 wrenches. <p>Caution</p> <p>From the viewpoint of global environmental protection, make sure to use a vacuum pump for air purging.</p>
4 Disconnect the flare nut for gas piping.		<ul style="list-style-type: none"> When the pipings are disconnected, protect the both openings from entering moisture.

Step	Procedure	Points
5	<p>Disconnect the flare nut for liquid piping.</p>  <p>(R17302)</p>	
2.	<p>Remove the indoor heat exchanger.</p> <p>1 Remove the indoor unit from the installation plate.</p>  <p>(R17303)</p> <p>2 Unfasten the hook of the piping fixture on the back of the indoor unit.</p>  <p>(R8038)</p>  <p>(R8039)</p>	

Step	Procedure	Points
3	<p>Slightly widen the auxiliary piping.</p> 	
4	<p>Remove the screw on the left side and unfasten the hook on the rear side.</p>  	<p>Caution When removing or reassembling the indoor heat exchanger, be sure to wear gloves or wrap it with cloth before proceeding to the work. (You may be injured by the fins.)</p>
5	<p>Push and unfasten the hook on the right side and lift up the indoor heat exchanger.</p> 	
6	<p>Pull the indoor heat exchanger to the front side to unfasten the hooks completely, and then remove it.</p> 	

8. Removal of Fan Rotor / Fan Motor

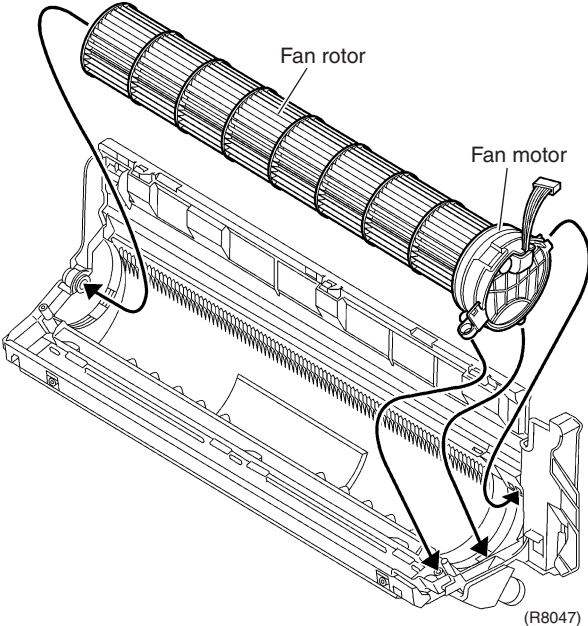
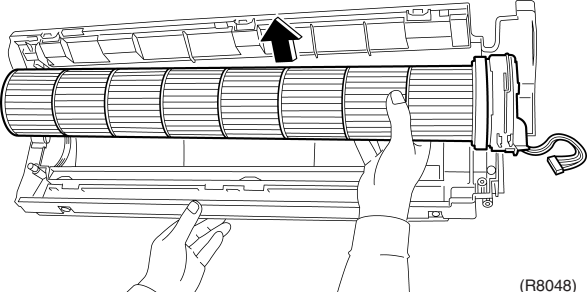
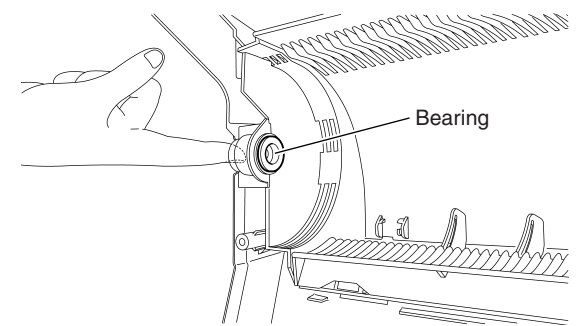
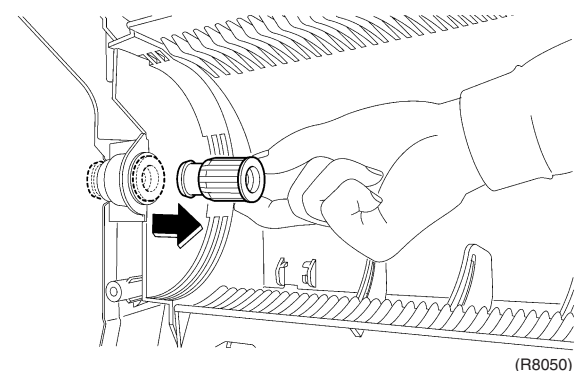
Procedure

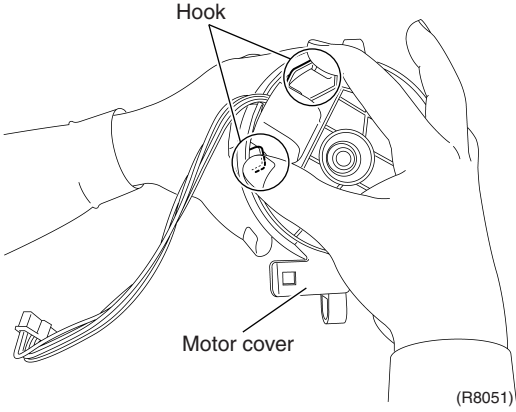
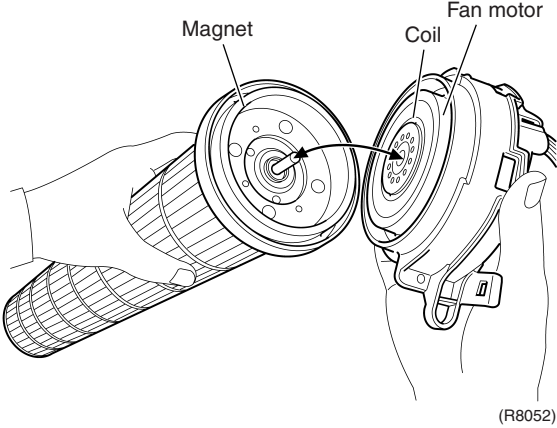
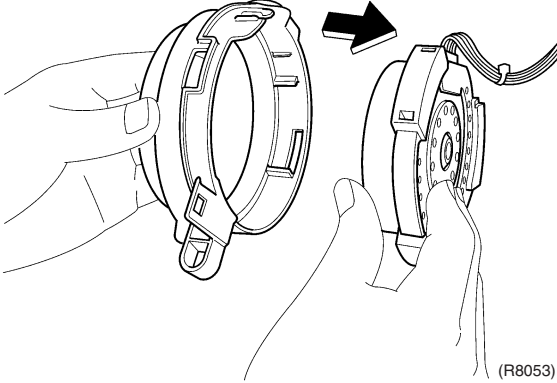


Warning

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Step	Procedure	Points
1. Remove the right side plate.	<p>Right side plate (R17337)</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 screw of the right side plate.	<p>Hook (R8045)</p>	
2 Unfasten the hook of the right side plate.	<p>(R8046)</p>	
3 Remove the right side plate.		

Step	Procedure	Points
2.	Remove the fan rotor and the fan motor.	
1	<p>The fan motor has 3 projections on the right side.</p> <p>The fan rotor has a rotating shaft on the left side.</p>  <p>(R8047)</p>	
2	<p>Remove the fan rotor.</p>  <p>(R8048)</p>	
3	<p>Press the bearing from outside.</p>  <p>(R8049)</p>	
4	<p>Remove the bearing.</p>  <p>(R8050)</p>	

Step	Procedure	Points
5	Unfasten the 2 hooks of the motor cover.	 <p>(R8051)</p>
6	Pull out the fan motor from the fan rotor to remove.	 <p>(R8052)</p>  <p>(R8053)</p> <ul style="list-style-type: none"> ■ The magnet of the fan motor is united with the fan rotor. Be careful not to attract metal waste to the magnet. Keep away from the materials that can be affected by magnetic force also.

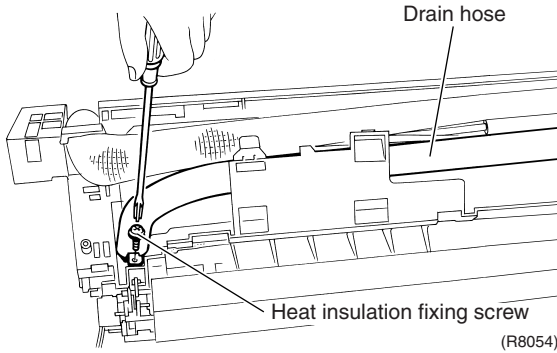
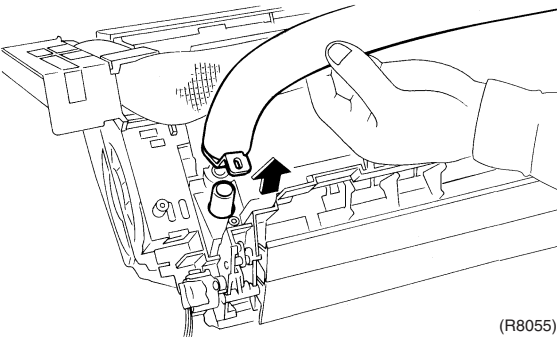
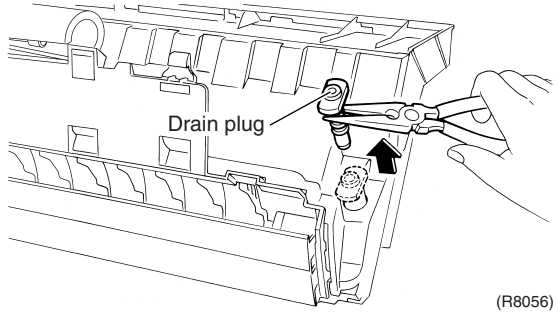
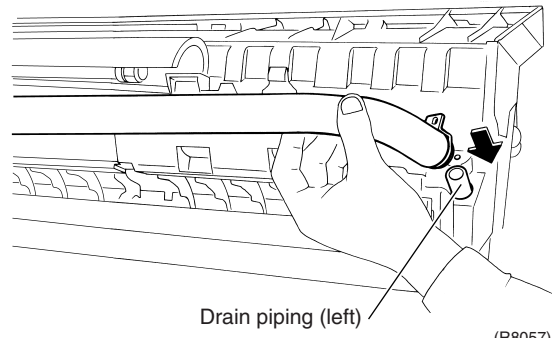

9. Exchange of Piping Direction (Drain Hose)

Procedure



Warning

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Step	Procedure	Procedure	Points
1	Remove the heat insulation fixing screw on the right side and remove the drain hose.	 <p>Drain hose</p> <p>Heat insulation fixing screw</p> <p>(R8054)</p>  <p>(R8055)</p>	
2	Remove the drain plug located at the left side with pliers and insert the removed drain plug into the right side with a hexagonal wrench (4 mm).	 <p>Drain plug</p> <p>(R8056)</p>	
3	Insert the drain hose to the left side, and tighten it with the heat insulation fixing screw.	 <p>Drain piping (left)</p> <p>(R8057)</p>	<p> Caution Do not thrust in the drain plug with a sharp-pointed tool like a screwdriver. (The drain plug may be broken, resulting in water leakage.)</p> <ul style="list-style-type: none"> ■ After removing the drain hose, to prevent water leakage, make sure to mount the heat insulation fixing screw as it was.

Revision History

Month / Year	Version	Revised contents
06 / 2013	Si04-853	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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