



Si041652EB

# REMOVAL PROCEDURE



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

## 4.0/5.0/6.0/7.1 kW Class 18000/24000/28000 Btu/h Class



Indoor Unit



Inverter



Wall Mounted Type



# Service Manual

# Removal Procedure

## Indoor Unit

### ●Cooling Only

CTKS60QVM  
CTKS71QVM

FTKC50QVM  
FTKC60QVM  
FTKC71QVM

FTKC50QVMV  
FTKC60QVMV  
FTKC71QVMV

FTKC50QVM4  
FTKC60QVM4  
FTKC71QVM4

FTKC18QV2S  
FTKC24QV2S  
FTKC28QV2S

FTKM50QVMA  
FTKM60QVMA  
FTKM71QVMA

### ●Heat Pump

FTHF40RVLT  
FTHF50RVLT

FTHM50HVMV  
FTHM60HVMV  
FTHM71HVMV

FTHP40HVLT  
FTHP50HVLT

FTXF60QVMA  
FTXF71QVMA

FTXM50QVMA  
FTXM60QVMA  
FTXM71QVMA

FTXV50QVMV  
FTXV60QVMV  
FTXV71QVMV

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

# 1. Air Filters



**Warning**

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

Step	Procedure	Points
<p>1. Remove the air filters.</p> <p>1 Open the front panel.</p> <p>2 Unfasten the 2 hooks and pull out the air filter downward to remove it.</p> <p>3 Remove the other air filter in the same way.</p>		<ul style="list-style-type: none"> <li>■ The air filters are not marked for difference between the right and left sides.</li> <li>■ When reassembling, insert the air filter along the guides.</li> <li>■ Insert the air filter with the "FRONT" mark faced up.</li> <li>■ Be sure to insert the 2 bottom hooks when installing the air filters.</li> </ul>
<p>2. Remove the optional filters.</p> <p>1 Unfasten the 4 projections to remove the optional filter ASSY.</p> <p>2 Unfasten the 5 hooks and remove the optional filter from its frame.</p> <p>3 Remove the other optional filter in the same way.</p>	<p>Back side</p>	<ul style="list-style-type: none"> <li>■ The right and left filters are interchangeable.</li> </ul>

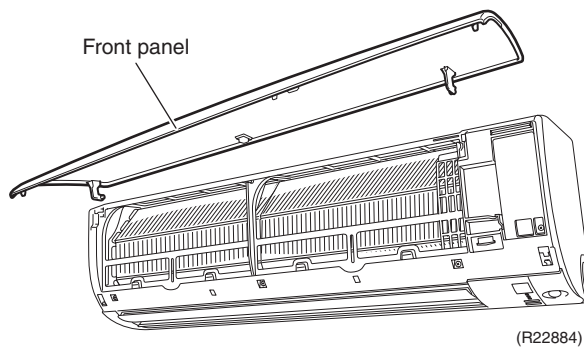
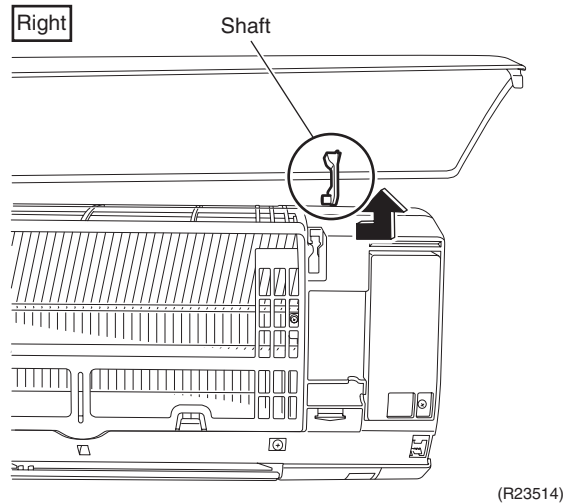
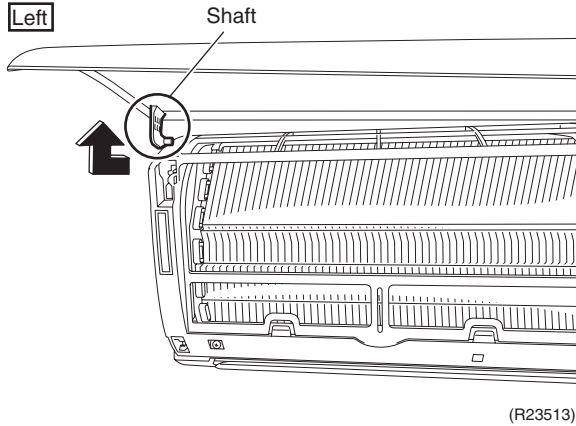
## 2. Front Panel



### Warning

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

Step	Procedure	Points
1	Release the shaft on both sides.	<ul style="list-style-type: none"> <li>■ The shaft on each side can be released easily by pushing outward.</li> </ul>
2	Remove the front panel.	<ul style="list-style-type: none"> <li>■ When reassembling the front panel, fit the right and left shafts one by one into the grooves and fully push them in position.</li> </ul>



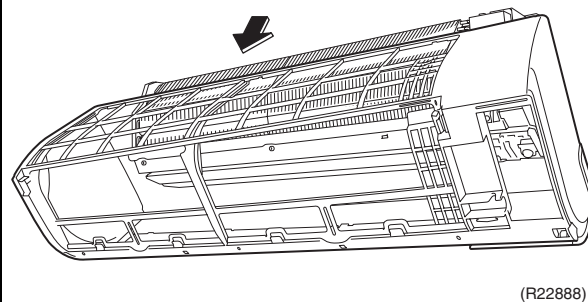
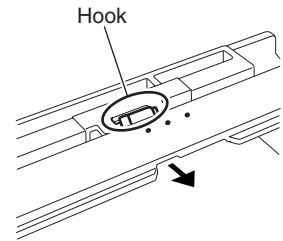
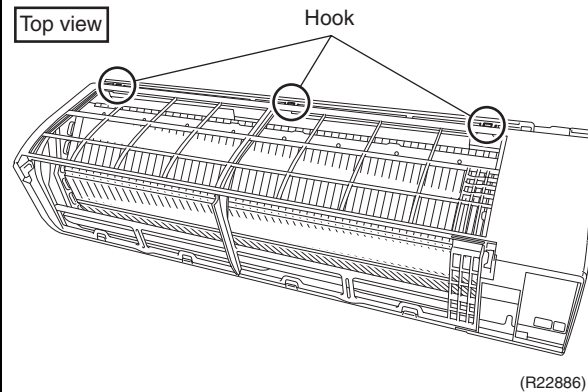
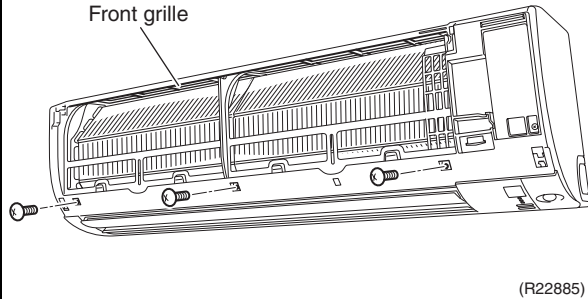
### 3. Front Grille



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

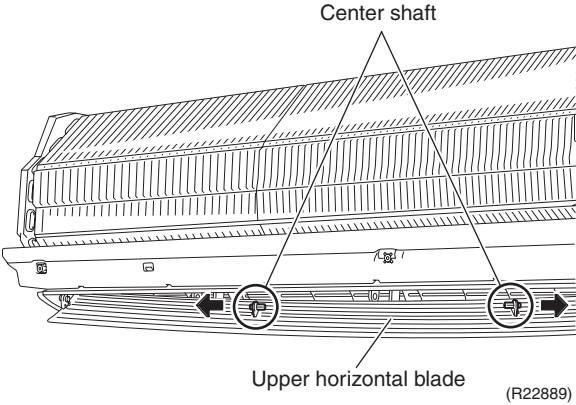
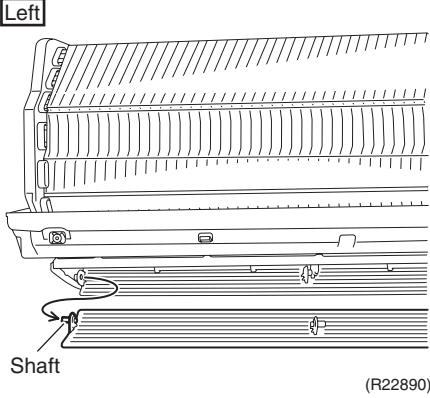
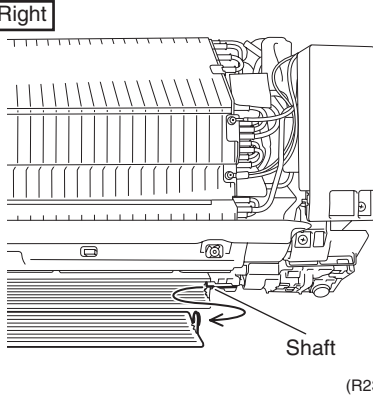
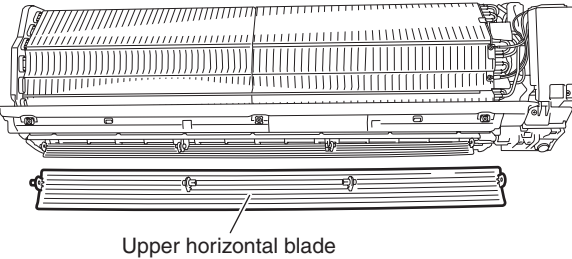
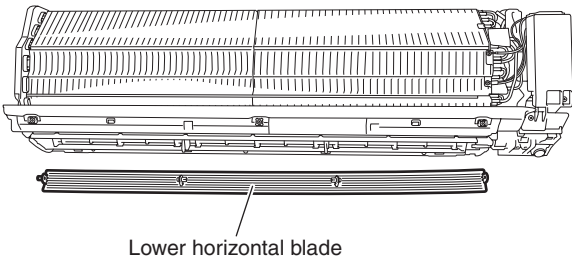


# 4. Horizontal Blades



**Warning**

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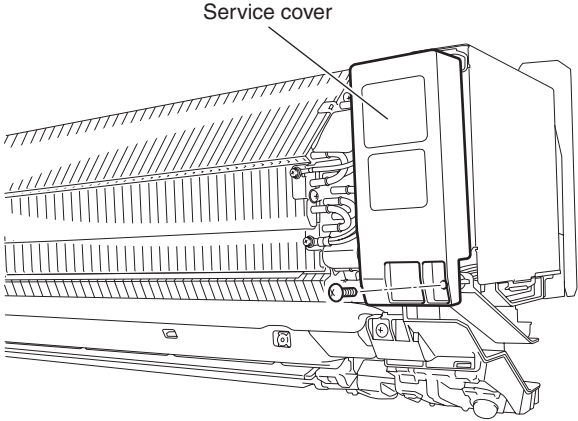
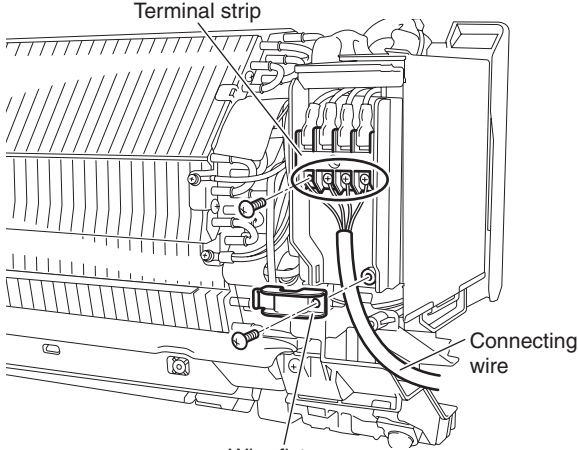
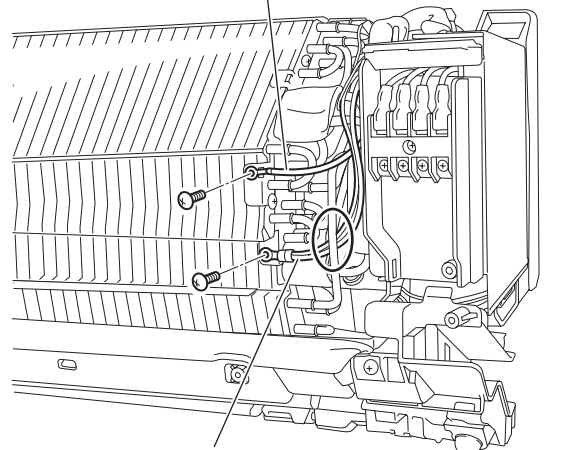
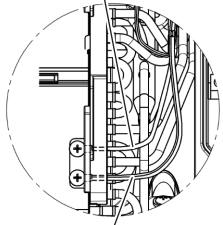
Step	Procedure	Points
1	Release the center shafts of the upper horizontal blade while bending the blade slightly.	
2	Release the left shaft.	
3	Release the right shaft.	
4	Remove the upper horizontal blade.	 <ul style="list-style-type: none"> <li>■ Installation procedure</li> <li>1. Fit the right shaft of the horizontal blade first. Make sure to rotate the horizontal blade so the shaft fits in the correct position.</li> <li>2. Fit the horizontal blade to the center and left shafts.</li> </ul>
5	Remove the lower horizontal blade in the same way.	 <ul style="list-style-type: none"> <li>■ When reassembling, install the lower horizontal blade first.</li> </ul>

# 5. Electrical Box

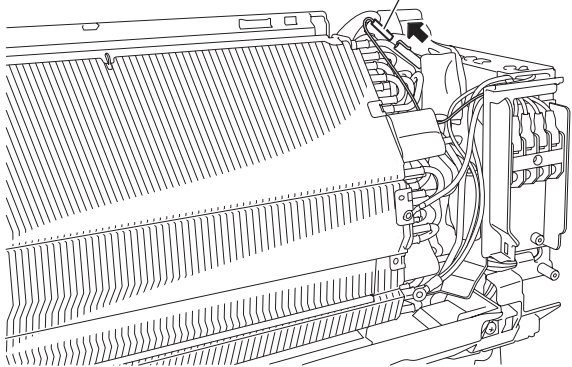
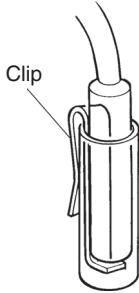
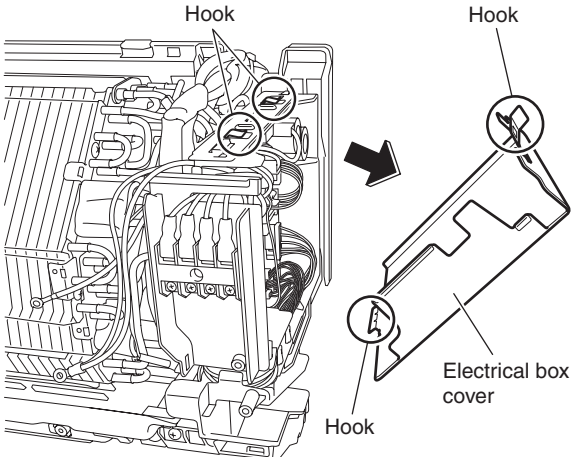
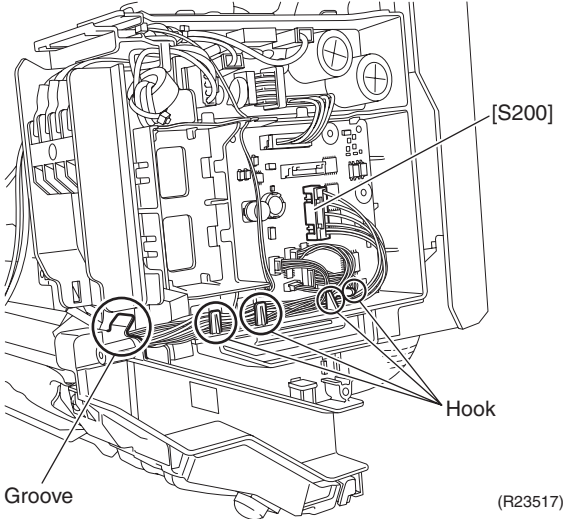


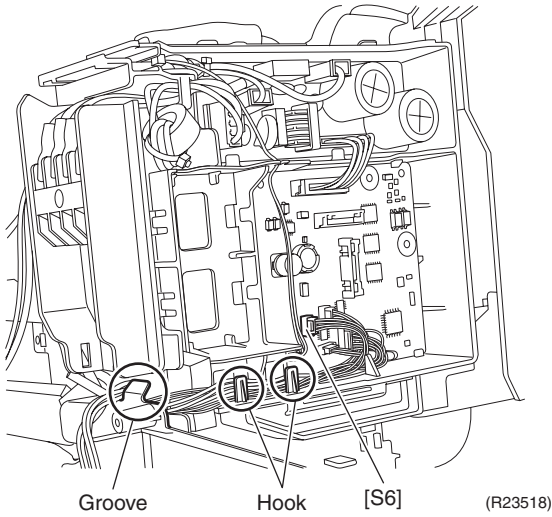
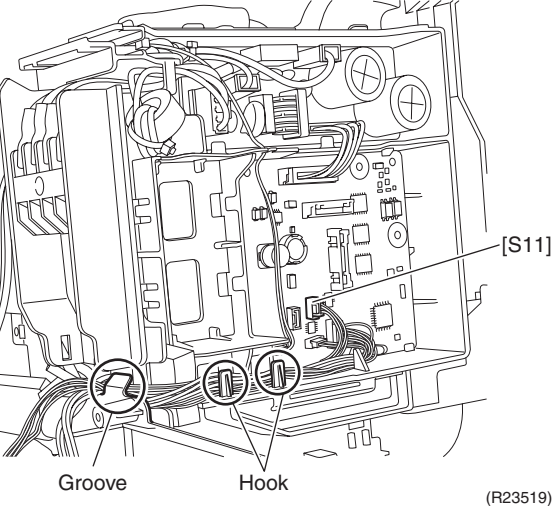
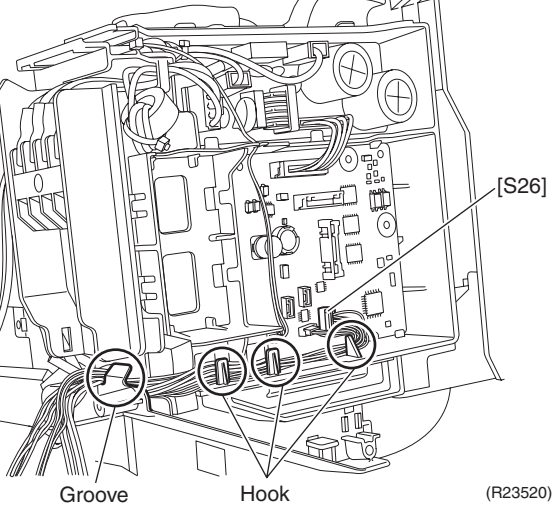
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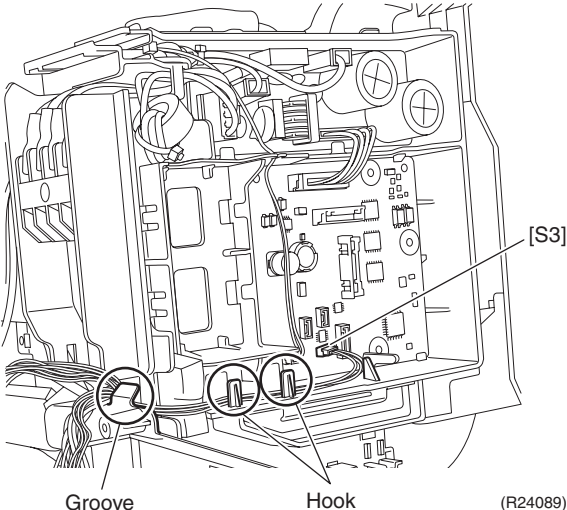
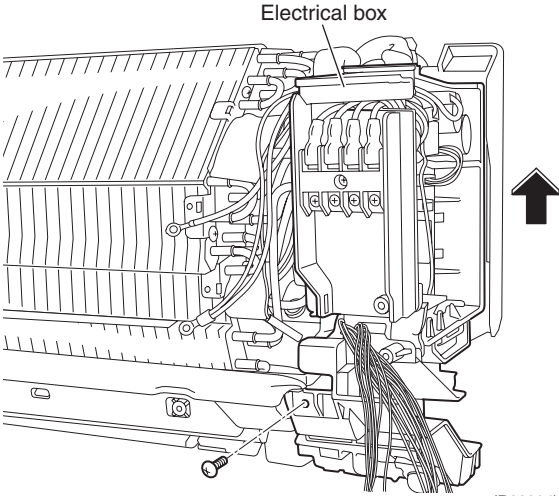
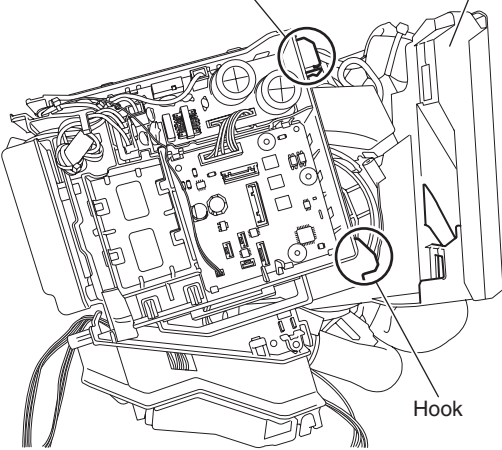
◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
<p>1. Disconnect the connecting wire.</p> <p>1 Remove the screw, and then the service cover.</p> <p>2 Remove the screw, and then the wire fixture.</p> <p>3 Remove the 4 screws of the terminal strip and disconnect the connecting wire.</p>	 <p>Service cover</p> <p>(R22894)</p>  <p>Terminal strip</p> <p>Wire fixture</p> <p>Connecting wire</p> <p>(R24136)</p>	<ul style="list-style-type: none"> <li>■ The service cover can be removed without removing the front grille.</li> <li>■ The service cover has no hook and may fall when the screw is loosened. Be careful not to drop the service cover.</li> </ul>
<p>2. Remove the electrical box.</p> <p>1 Remove the 2 screws and detach the earth/ground wires.</p>	 <p>Earth/ground wire (green/yellow)</p> <p>Earth/ground wire (green)</p> <p>(R23516)</p>  <p>Earth/ground wire (green)</p> <p>(R24088)</p>	<ul style="list-style-type: none"> <li>■ When reassembling, make sure to pass the green earth/ground wire behind the heat exchanger tube, except for FTXF60QVMA. For FTXF60QVMA, the green earth/ground wire should pass above the heat exchanger tube.</li> </ul>



Step		Procedure	Points
2	Pull out the indoor heat exchanger thermistor.	<p style="text-align: center;">Indoor heat exchanger thermistor</p>  <p style="text-align: right;">(R22897)</p>	<ul style="list-style-type: none"> <li>■ Be careful not to lose the clip of the thermistor.</li> </ul> <div style="text-align: center;">  <p>(R11268)</p> </div> <ul style="list-style-type: none"> <li>■ The location of the indoor heat exchanger thermistor varies depending on the model.</li> </ul>
3	Unfasten the 4 hooks and remove the electrical box cover.	 <p style="text-align: right;">(R22898)</p>	<ul style="list-style-type: none"> <li>■ When reassembling, make sure that the 4 hooks are securely fastened.</li> </ul>
4	Disconnect the connector [S200].		[S200]: fan motor
5	Release the harnesses from the 4 hooks and the groove.	 <p style="text-align: right;">(R23517)</p>	

Step	Procedure	Points
6	Disconnect the connector [S6].	[S6]: swing motor for horizontal blades
7	Release the harnesses from the 2 hooks and the groove.	
8	Disconnect the connector [S11].	[S11]: swing motor for vertical blades
9	Release the harnesses from the 2 hooks and the groove.	<ul style="list-style-type: none"> <li>■ Some models do not have the harness for [S11].</li> </ul>
		
10	Disconnect the connector [S26].	[S26]: display/signal receiver PCB
11	Release the harnesses from the 3 hooks and the groove.	

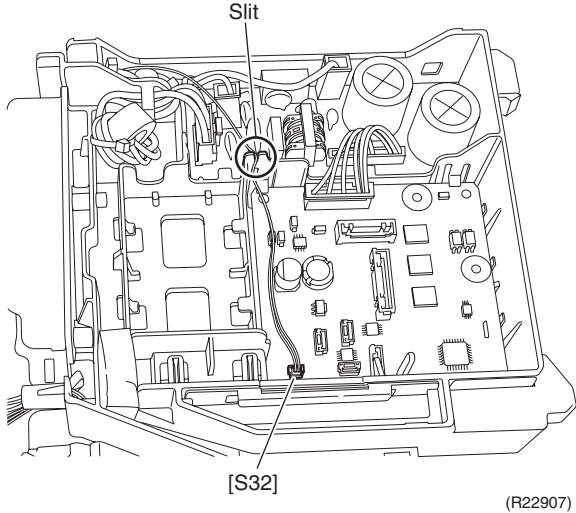
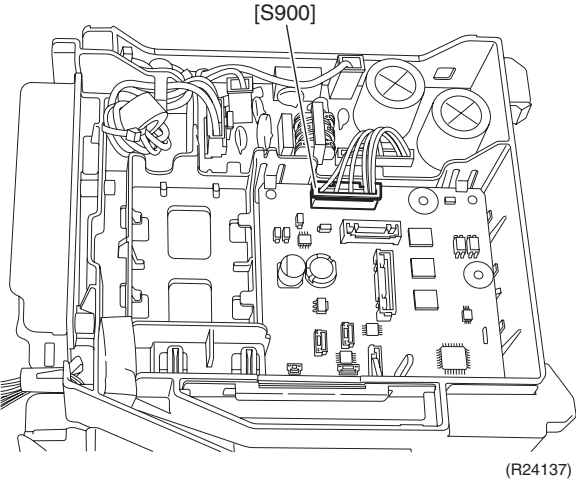
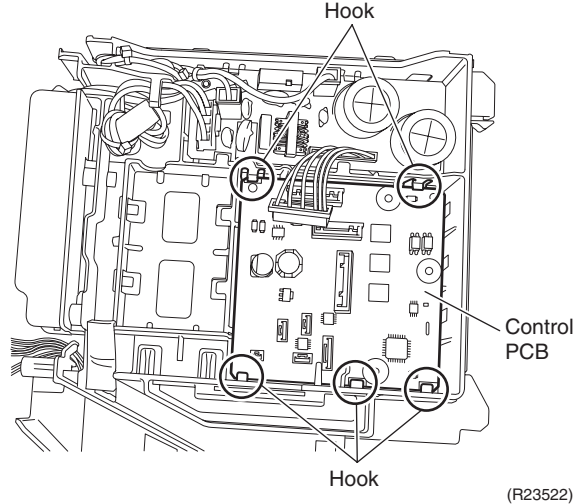
Step	Procedure	Points
12	Disconnect the connector [S3].	[S3]: INTELLIGENT EYE sensor PCB
13	Release the harnesses from the 2 hooks and the groove.	 <p data-bbox="1023 450 1066 479">[S3]</p> <p data-bbox="560 712 635 741">Groove</p> <p data-bbox="799 712 858 741">Hook</p> <p data-bbox="995 712 1066 741">(R24089)</p>
14	Remove the screw of the electrical box.	<ul style="list-style-type: none"> <li>When reassembling, make sure the hook at the front of the electrical box is securely fastened.</li> </ul>
15	Slightly lift the electrical box and remove it.	 <p data-bbox="762 779 895 808">Electrical box</p> <p data-bbox="1182 1173 1241 1202">Hook</p> <p data-bbox="1378 1173 1449 1202">(R22905)</p>
	<p data-bbox="512 1346 619 1375">Right view</p>  <p data-bbox="735 1346 794 1375">Hook</p> <p data-bbox="906 1346 1038 1375">Bottom frame</p> <p data-bbox="932 1778 991 1807">Hook</p> <p data-bbox="995 1832 1066 1861">(R24090)</p>	<ul style="list-style-type: none"> <li>When reassembling, make sure that the 2 hooks are securely fastened to the bottom frame.</li> </ul>

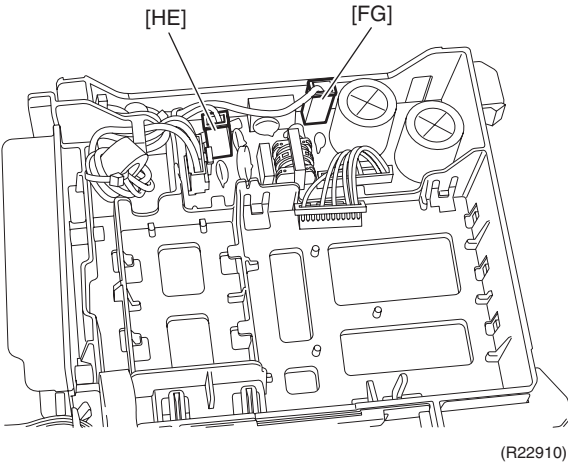
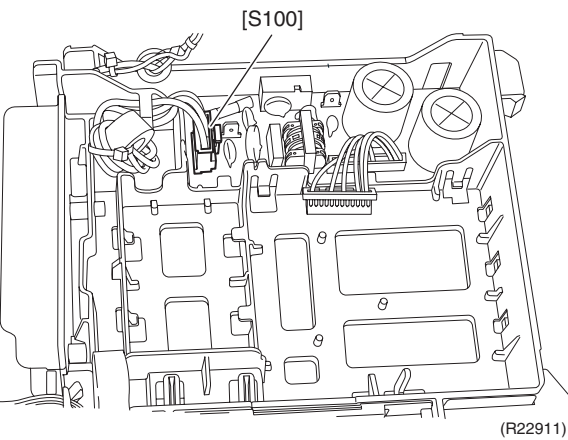
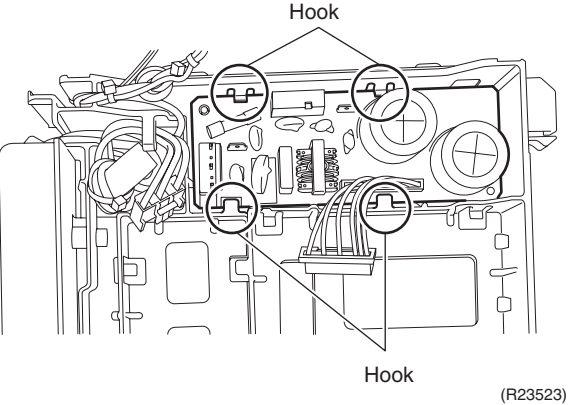
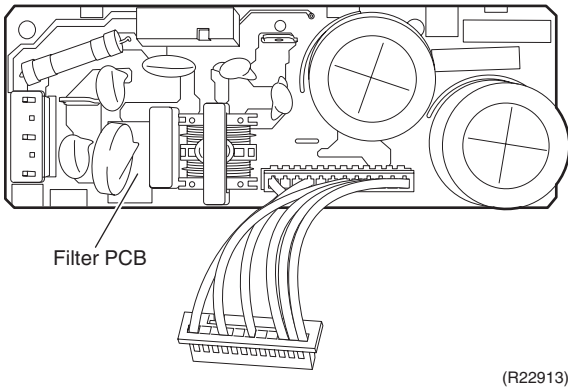
# 6. PCBs

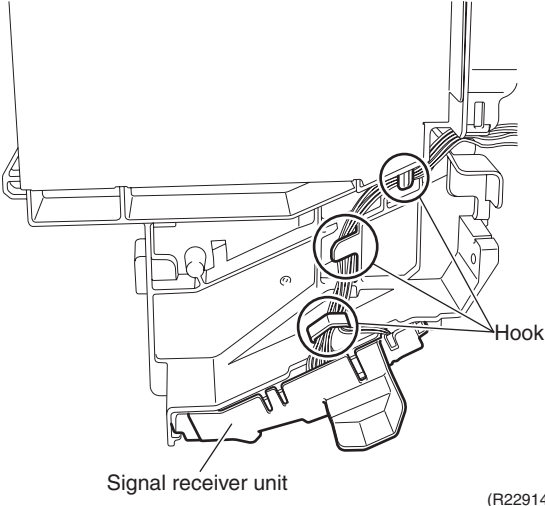
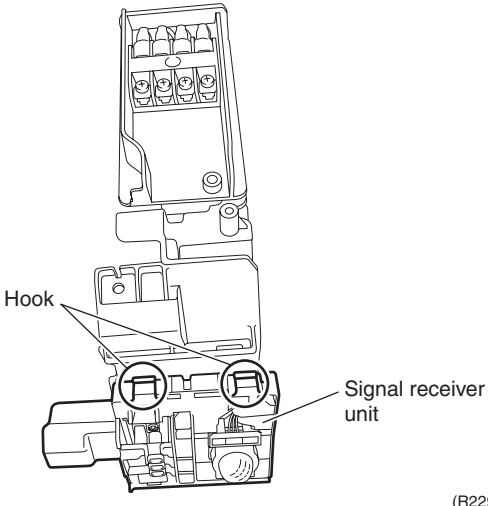
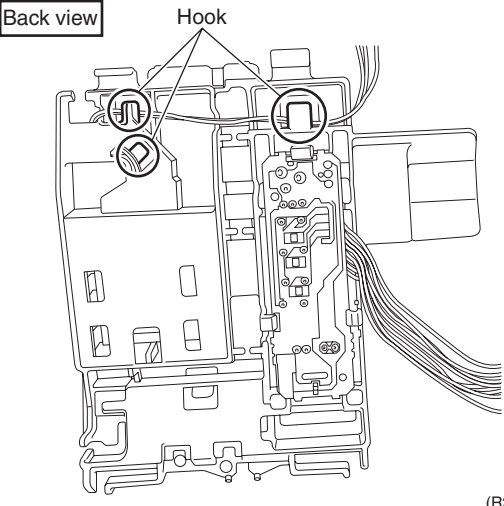


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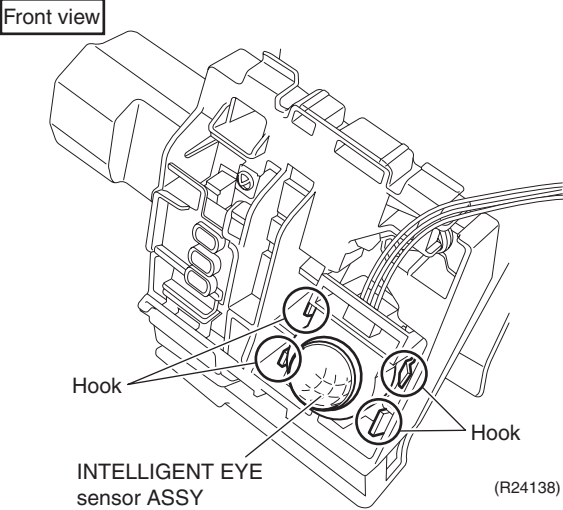
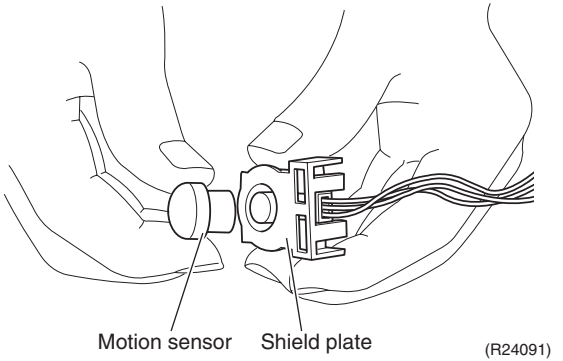
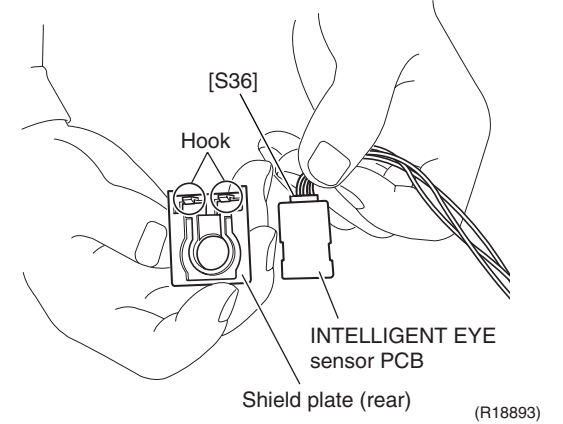
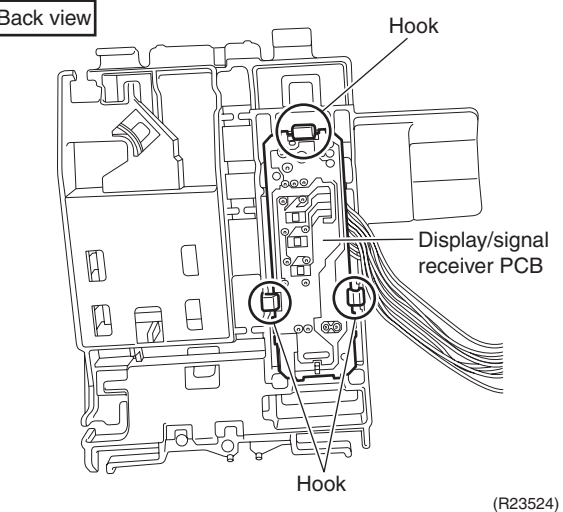
◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1. Remove the control PCB.	 <p style="text-align: center;">[S32]</p> <p style="text-align: right;">(R22907)</p>	<p>[S32]: indoor heat exchanger thermistor</p> <ul style="list-style-type: none"> <li>■ When reassembling, make sure to insert the thermistor harness back into the slit.</li> </ul>
3. Remove the connector [S900].	 <p style="text-align: right;">(R24137)</p>	<p>[S900]: filter PCB</p>
4. Unfasten the 5 hooks and remove the control PCB.	 <p style="text-align: right;">(R23522)</p>	

Step	Procedure	Points
2. Remove the filter PCB.		[FG], [HE]: earth/ground terminal
1 Disconnect the terminals [HE] and [FG].	 <p>(R22910)</p>	
2 Disconnect the connector [S100].	 <p>(R22911)</p>	[S100]: terminal strip
3 Unfasten the 4 hooks and remove the filter PCB.	 <p>(R23523)</p>  <p>(R22913)</p>	

Step	Procedure	Points
<p>3. Remove the INTELLIGENT EYE sensor PCB.</p>	<p>1 Release the harness of the signal receiver unit from the 3 hooks.</p>  <p style="text-align: right;">(R22914)</p>	
<p>2 Unfasten the 2 hooks and remove the signal receiver unit.</p>	 <p style="text-align: right;">(R22915)</p>	<p>■ When reassembling, make sure to fit the bottom of the signal receiver unit before fastening the 2 hooks.</p>
<p>3 Release the harness on the back of the signal receiver unit from the 3 hooks.</p>	<p>Back view</p>  <p style="text-align: right;">(R22916)</p>	



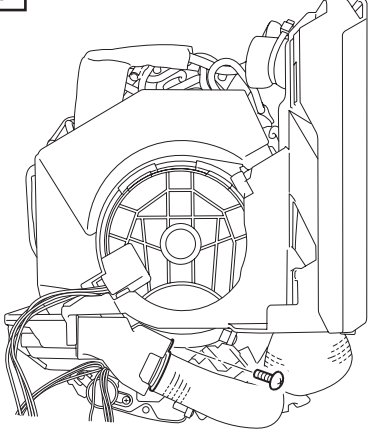
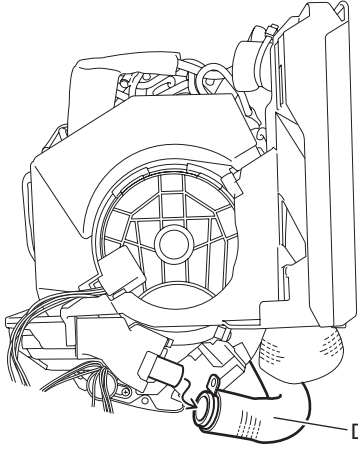
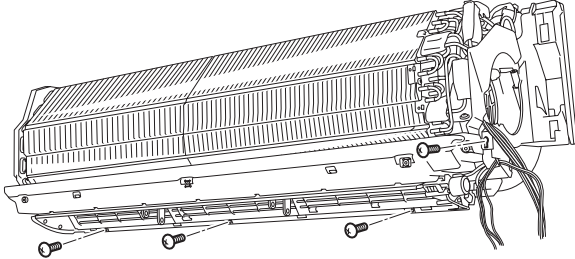
Step	Procedure	Points	
4	Unfasten the 4 hooks and remove the INTELLIGENT EYE sensor ASSY.		
5	Remove the motion sensor from the shield plate.		<p>■ When reassembling the motion sensor, make sure you hear a clicking noise. Otherwise, the sensor is not completely set.</p>
6	Unfasten the 2 hooks and remove the shield plate.		
7	Disconnect the connector [S36].	[S36]: control PCB	
8	Remove the INTELLIGENT EYE sensor PCB.		
4. Remove the display/signal receiver PCB.			
1	Unfasten the 3 hooks on the back and remove the display/signal receiver PCB.		

# 7. Drain Pan / Swing Motors

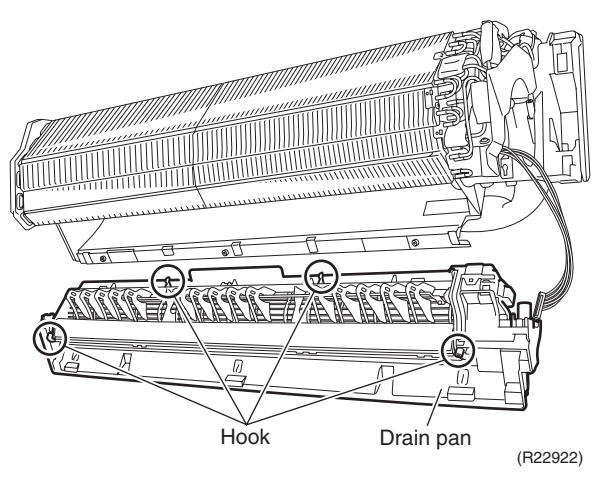
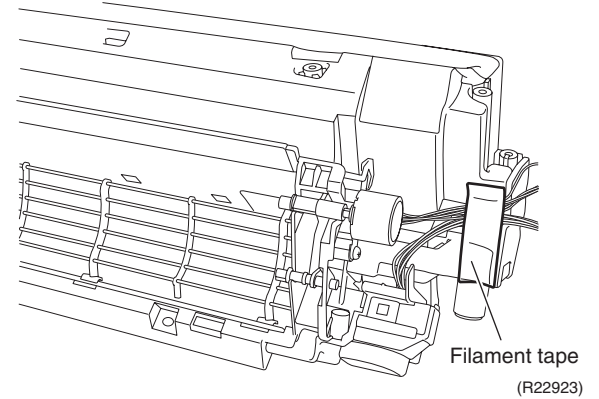
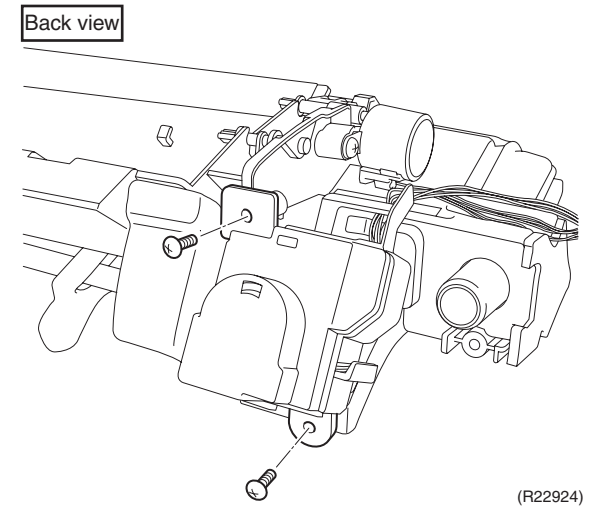
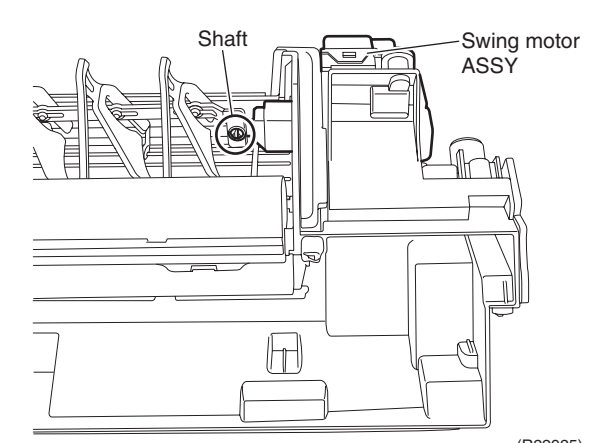


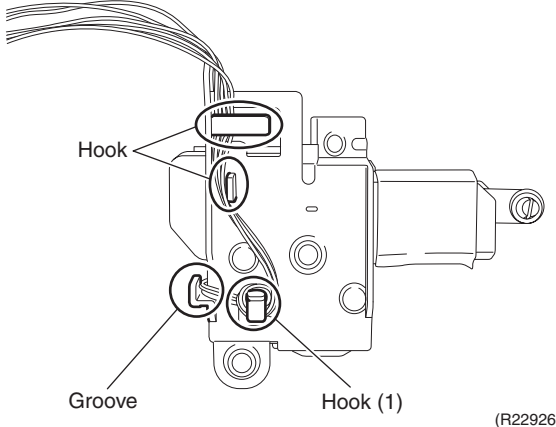
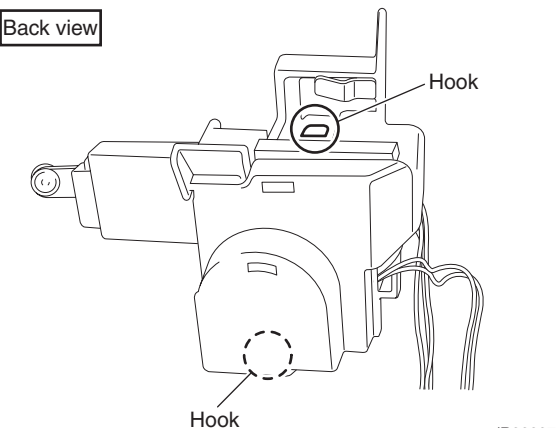
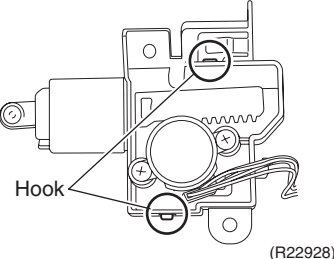
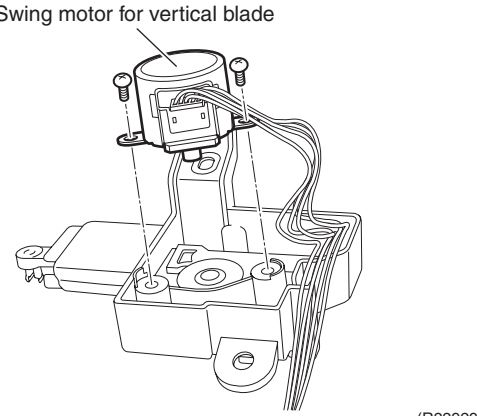
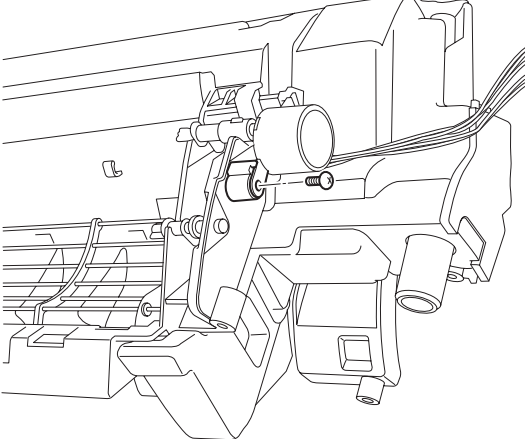
**Warning**

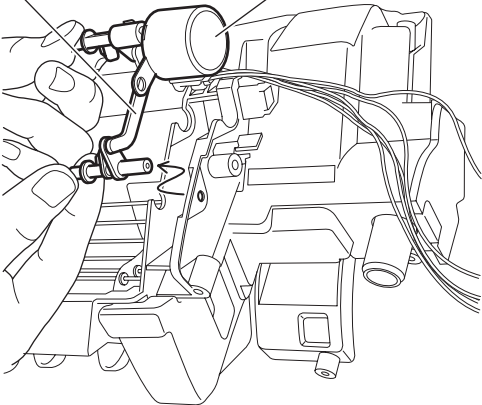
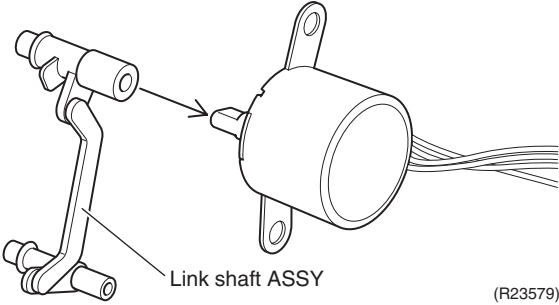
◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1. Remove the drain pan.	<p data-bbox="504 394 608 421">Right view</p>  <p data-bbox="995 842 1066 864">(R22919)</p>	<ul style="list-style-type: none"> <li>■ Use a short screwdriver from the back.</li> </ul>
2	<p data-bbox="196 891 432 956">Disconnect the drain hose.</p>  <p data-bbox="919 1346 1023 1368">Drain hose</p> <p data-bbox="995 1395 1066 1417">(R22920)</p>	<ul style="list-style-type: none"> <li>■ Hold the indoor unit up with a piece of wood.</li> <li>■ Place a plastic sheet around the drain pan to prevent wetting the floor with remaining drain.</li> <li>■ If the drain hose is embedded in the wall, disconnect the drain hose beforehand.</li> </ul>
3	<p data-bbox="196 1451 448 1478">Remove the 4 screws.</p>  <p data-bbox="995 1767 1066 1789">(R22921)</p>	



Step	Procedure	Points
4	Unfasten the 4 hooks and remove the drain pan.	<ul style="list-style-type: none"> <li>When reassembling, make sure that all the 4 hooks are securely fastened.</li> </ul>
		
2. Remove the swing motor for vertical blades.		<ul style="list-style-type: none"> <li>Some models do not have the swing motor for vertical blades.</li> </ul>
1	Remove the filament tape.	
2	Remove the 2 screws.	<p>Back view</p> 
3	Release the shaft of the vertical blade from the swing motor shaft with a flat screwdriver and remove the swing motor ASSY.	

Step	Procedure	Points
4	<p>Release the harness from the 3 hooks and the groove.</p> 	<ul style="list-style-type: none"> <li>When reassembling, make sure to wrap the harness around the hook (1) counterclockwise.</li> </ul>
5	<p>Unfasten the 2 hooks.</p> 	<ul style="list-style-type: none"> <li>When reassembling, make sure that the 2 hooks are securely fastened.</li> </ul> 
6	<p>Remove the 2 screws and remove the swing motor for vertical blades.</p> 	
3.	<p>Remove the swing motor for horizontal blades.</p>	
1	<p>Remove the screw.</p> 	

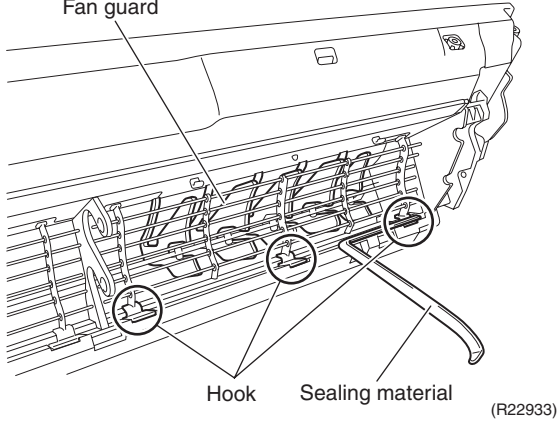
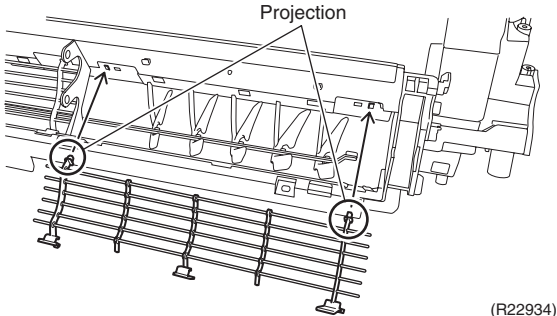
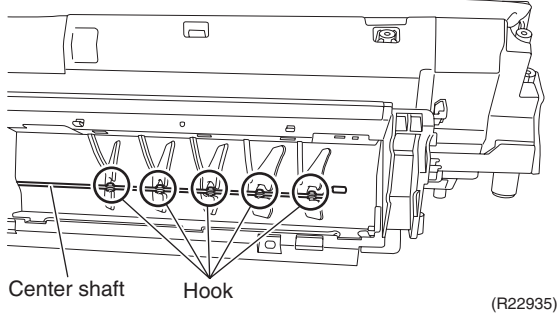
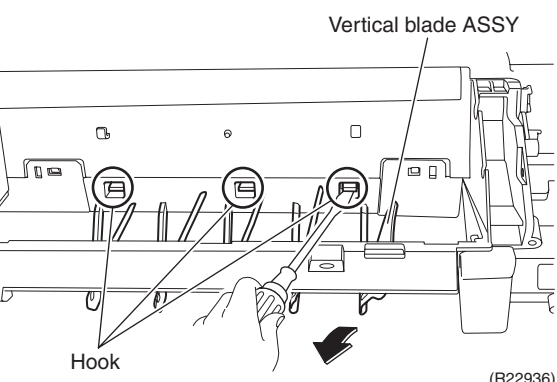
Step	Procedure	Points
2	Remove the swing motor for horizontal blades together with the link shaft ASSY.	
	<p>Link shaft ASSY      Swing motor for horizontal blade</p>  <p>(R24092)</p>	
3	Remove the swing motor for horizontal blades from the link shaft ASSY.	
	 <p>Link shaft ASSY</p> <p>(R23579)</p>	

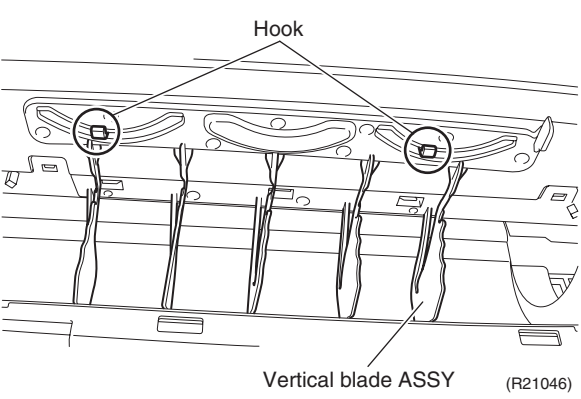
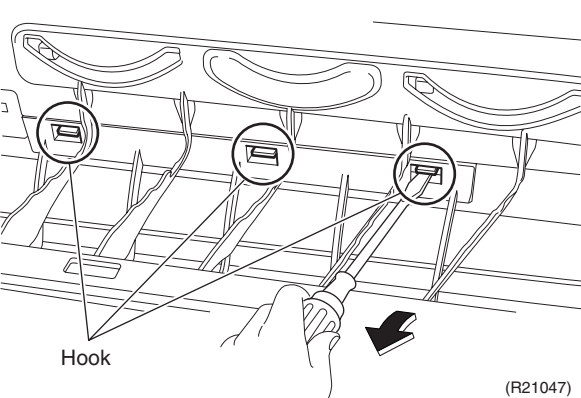
# 8. Fan Guards / Vertical Blade ASSYs



**Warning**

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

Step	Procedure	Points
<p>1. Remove the fan guards.</p> <p>1 Peel off the sealing material.</p> <p>2 Unfasten the 3 hooks at the bottom and remove the fan guard.</p> <p>3 Remove the other fan guards in the same way.</p>	 	<ul style="list-style-type: none"> <li>■ The fan guards are not marked for difference between right and left.</li> <li>■ Some models do not have fan guards.</li> <li>■ When reassembling, fit the fan guard to the 2 projections at the top, then fasten the 3 hooks at the bottom.</li> </ul>
<p>2. Remove the vertical blade ASSYs (auto-swing models).</p> <p>1 Unfasten the 5 hooks on each vertical blade ASSY to remove the center shaft.</p> <p>2 Unfasten the 3 hooks at the shaft mounting part by pressing them with a flat screwdriver.</p> <p>3 Remove the vertical blade ASSY.</p> <p>4 Remove the other vertical blade ASSYs in the same way.</p>	 	<ul style="list-style-type: none"> <li>■ It is necessary to unfasten all 15 hooks in order to remove the center shaft.</li> <li>■ Each vertical blade ASSY has 5 fins. It is not possible to replace the fins individually.</li> <li>■ The vertical blade ASSY is not marked for difference between right, center and left.</li> </ul>

Step	Procedure	Points
3. Remove the vertical blade ASSYs (manual swing models).		<ul style="list-style-type: none"> <li>■ Each vertical blade ASSY has 5 fins. It is impossible to replace only one fin.</li> <li>■ The vertical blade ASSY is not marked for difference between right, center and left.</li> </ul>
1 Unfasten the upper 2 hooks.		
2 Unfasten the 3 hooks at the shaft mounting part by pressing them with a flat screwdriver.		
3 Remove the vertical blade ASSY.		
4 Remove the other vertical blade ASSYs in the same way.		

# 9. Indoor Heat Exchanger



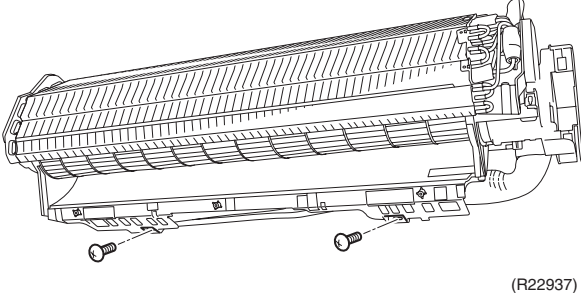
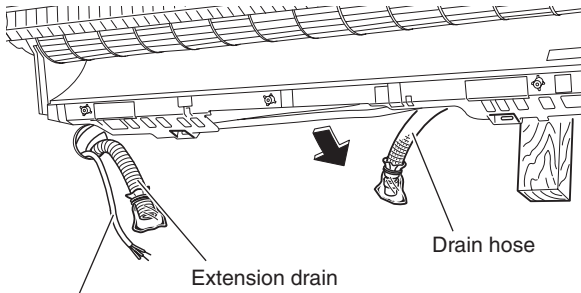
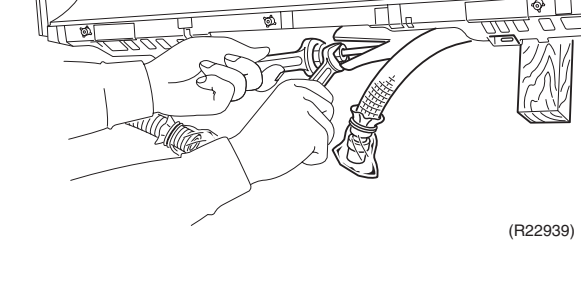
**Warning**

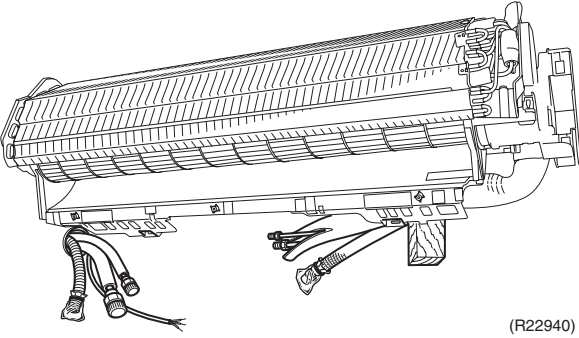
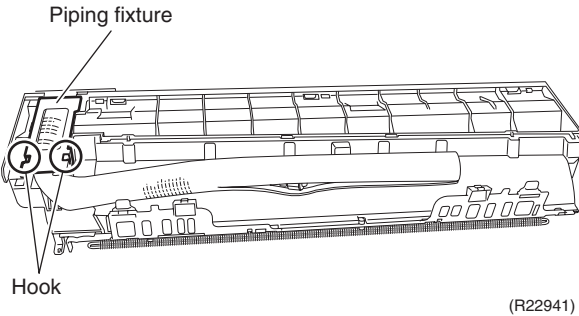
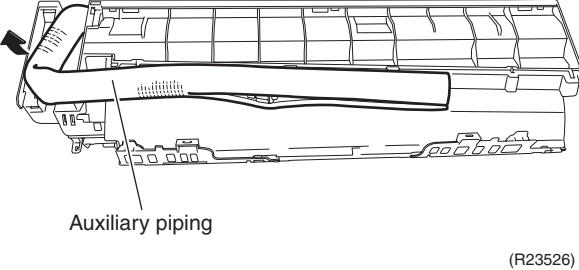
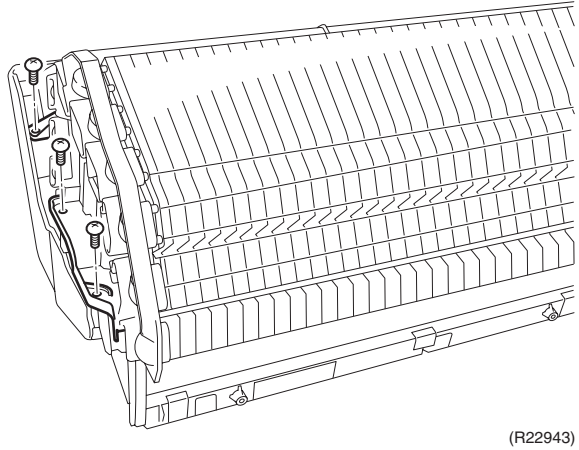
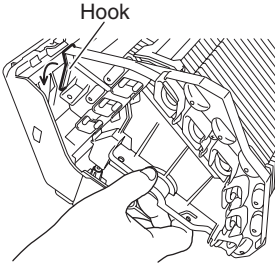
- ◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.
- ◆ In pump-down work, be sure to stop the compressor before disconnecting the refrigerant pipe. If the refrigerant pipe is disconnected with the compressor operating and the stop valve open, air may be sucked in and may generate an over-pressure in refrigeration cycle, thus resulting in pipe rupture or accidental injury.
- ◆ When removing or reinstalling the indoor heat exchanger, be sure to wear gloves or wrap the indoor heat exchanger with cloths. (You may be injured by the fins.)

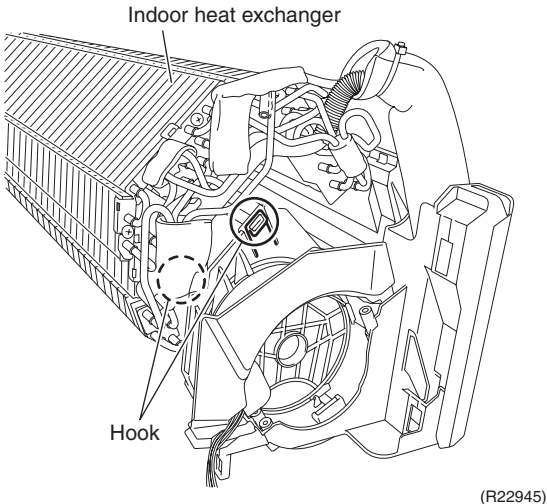
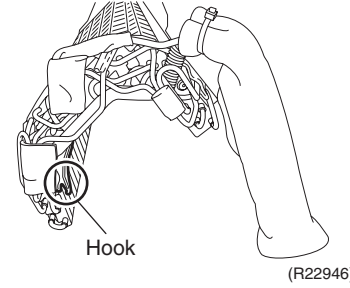


**Caution**

- ◆ Be sure to conduct pump down operation before disassembling the refrigerant pipe.
- ◆ 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.
- ◆ From the viewpoint of global environmental protection, make sure to use a vacuum pump for air purging.

Step	Procedure	Points
1. Disconnect the refrigerant piping.		
1 Remove the 2 screws.	 <p style="text-align: right;">(R22937)</p>	
2 Pull out the drain hose.	 <p style="text-align: right;">(R22938)</p>	<ul style="list-style-type: none"> <li>■ Hold the indoor unit up with a piece of wood.</li> <li>■ Place a plastic sheet around the drain pan to prevent from wetting the floor with remaining drain.</li> <li>■ If the drain hose is embedded in the wall, disconnect the drain hose beforehand.</li> </ul>
3 Disconnect the flare nut for gas piping.		<ul style="list-style-type: none"> <li>■ Carry out the removal works with 2 wrenches.</li> </ul>
4 Disconnect the flare nut for liquid piping.	 <p style="text-align: right;">(R22939)</p>	<ul style="list-style-type: none"> <li>■ When the pipings are disconnected, protect the open ends of both the pipe and the unit from moisture intrusion.</li> </ul>

Step	Procedure	Points
2. Remove the indoor heat exchanger.		
1 Detach the indoor unit from the installation plate.	 <p>(R22940)</p>	
2 Unfasten the 2 hooks and remove the piping fixture on the back of the indoor unit.	 <p>Piping fixture</p> <p>Hook</p> <p>(R22941)</p>	
3 Slightly pull out the auxiliary piping.	 <p>Auxiliary piping</p> <p>(R23526)</p>	
4 Remove the 3 screws on the left side and unfasten the hook on the rear side.	 <p>(R22943)</p>	<p>■ When reassembling, make sure that the hook is securely fastened.</p>  <p>Hook</p> <p>(R22944)</p>

Step	Procedure	Points
5	<p>Unfasten the 2 hooks on the right side and lift up the indoor heat exchanger.</p>	<p>■ When reassembling the indoor heat exchanger, make sure that the 2 hooks are securely fastened.</p>
	 <p>Indoor heat exchanger</p> <p>Hook</p> <p>(R22945)</p>	 <p>Hook</p> <p>(R22946)</p>



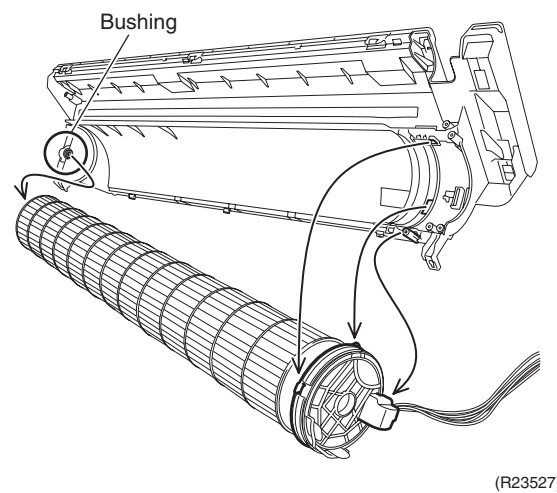
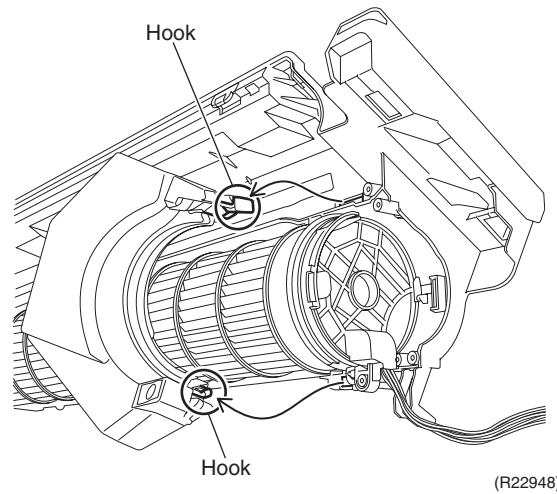
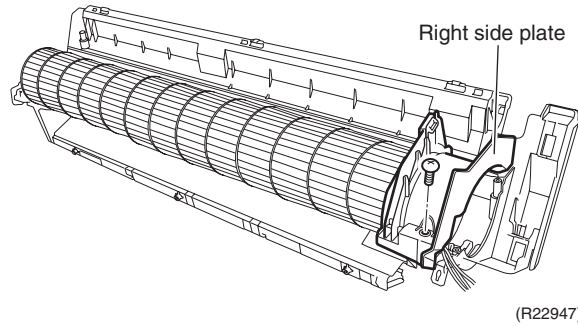
# 10. Fan Rotor / Fan Motor



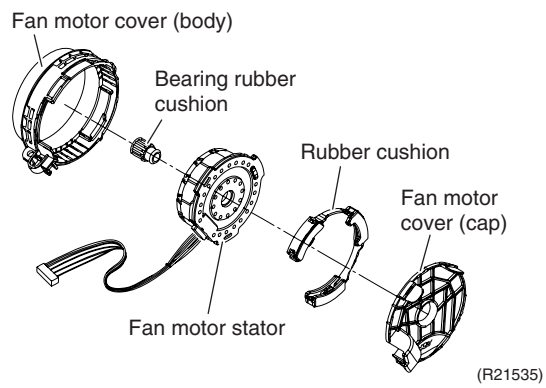
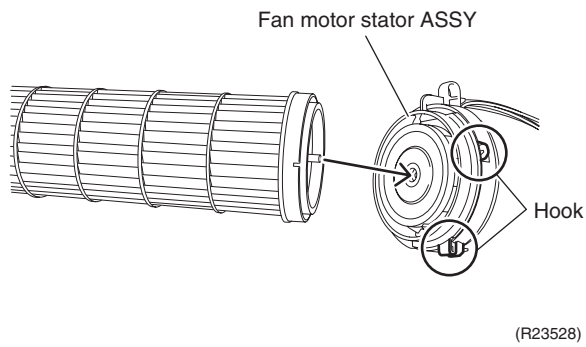
## Warning

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

Step	Procedure	Points
1	Remove the screw of the right side plate.	
2	Unfasten the 2 hooks and remove the right side plate.	
3	Remove the fan rotor/ fan motor.	<ul style="list-style-type: none"> <li>■ The fan motor has 3 projections on the right side.</li> <li>■ The fan rotor has a bushing on the left side.</li> </ul>



Step	Procedure	Points
4	Pull out and remove the fan motor stator ASSY.	
5	Unfasten the 2 hooks and disassemble the fan motor stator ASSY.	



# Revision History

Month / Year	Version	Revised contents
02 / 2016	Si041652E	First edition
06 / 2016	Si041652EA	Model addition: FTKC50/60/71QVM, FTKC50/60/71QVMV, FTKC50/60/71QVM4, FTKC18/24/28QV2S, FTHM50/60/71HVMV, FTHP40/50HVLT
11 / 2016	Si041652EB	Model addition: CTKS60/71QVM, FTHF40/50RVLT, FTXF60/71QVMA

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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