DAIKIN

Si041361E

REMOVAL PROCEDURE

SERVICE MANUAL

SERVICE MANUAL

2.5/3.5/5.0 kW Class

- Indoor Unit
- Inverter
- Wall Mounted Type



Service Manual
Removal Procedure

Indoor Unit

●Heat Pump

FTXZ25NV1B
FTXZ35NV1B
FTXZ50NV1B

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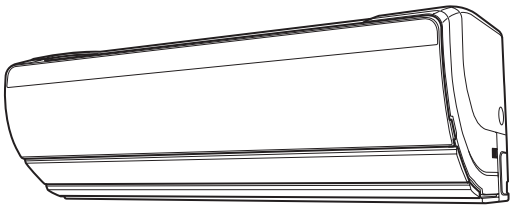
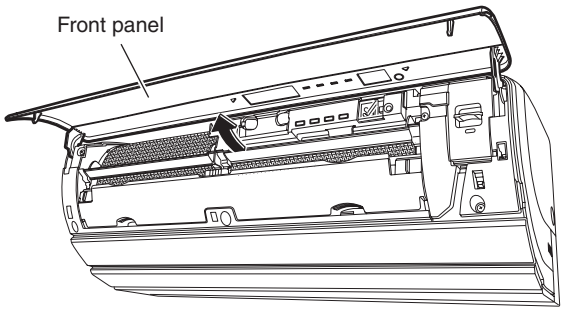
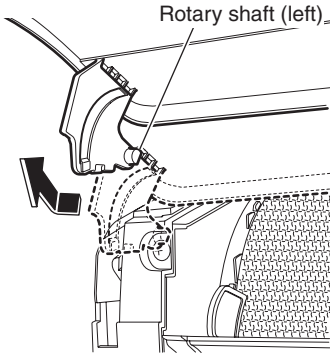
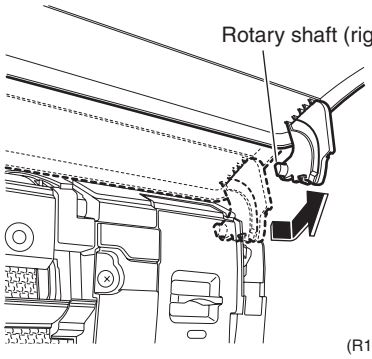
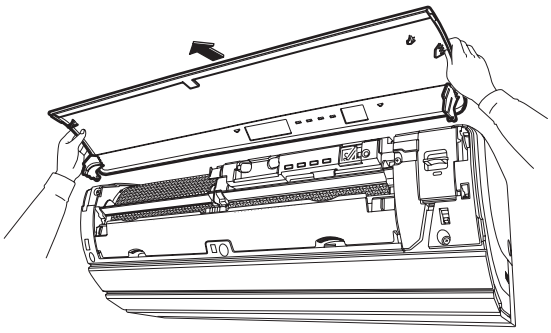
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Note: ◆ The illustrations may be slightly different depending on the model.

1. Front Panel

Warning

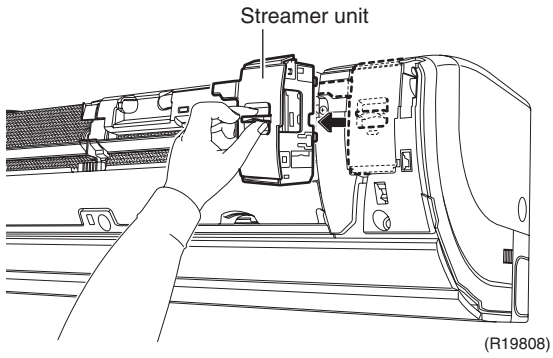
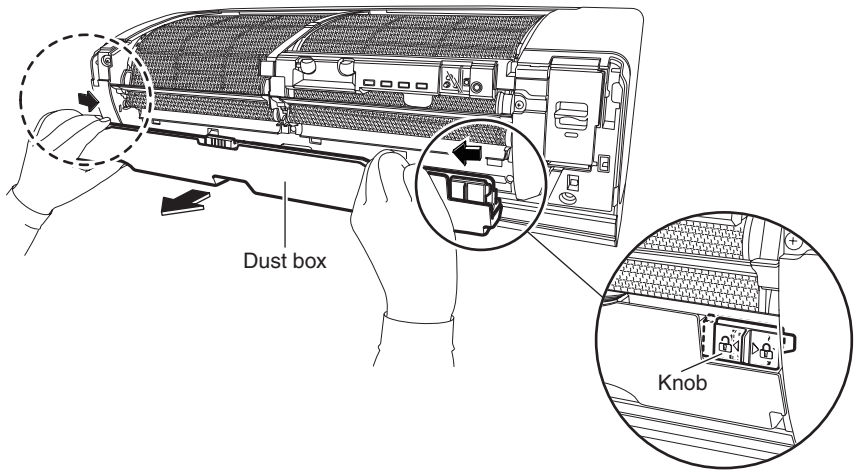
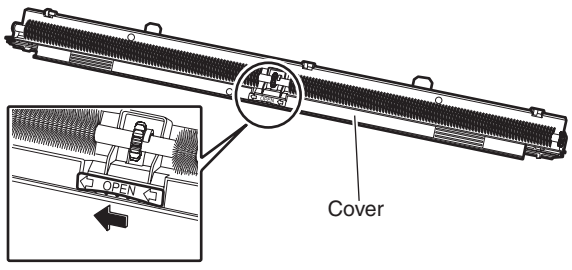
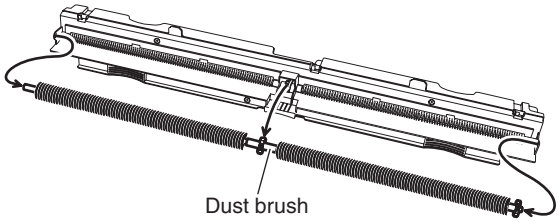
- **Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.**

Step	Procedure	Points
1. Appearance features	 (R19803)	
2. Remove the front panel.		
1 Open the front panel.	 (R19804)	
2 Slide the left rotary shaft to the outside and release it.	 (R19805)	
3 Release the right rotary shaft in the same way.	 (R19806)	
4 Remove the front panel.	 (R19807)	

2. Streamer Unit / Dust Box

Warning

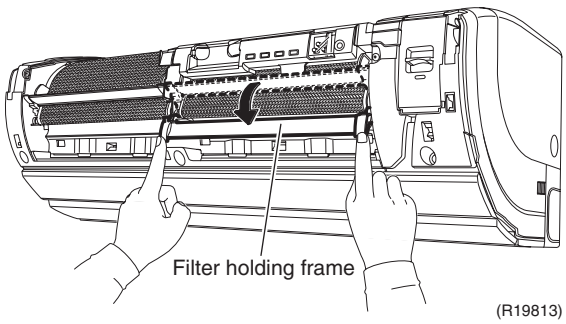
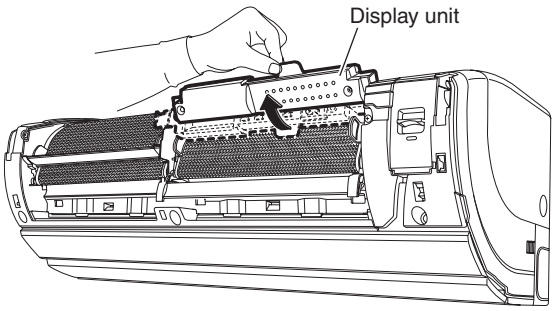
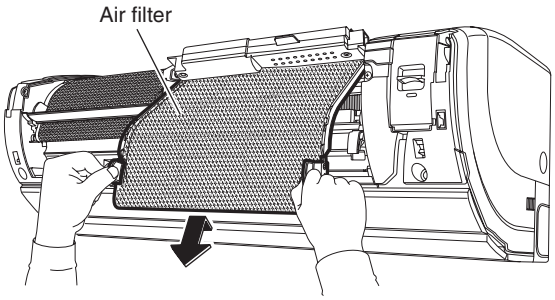
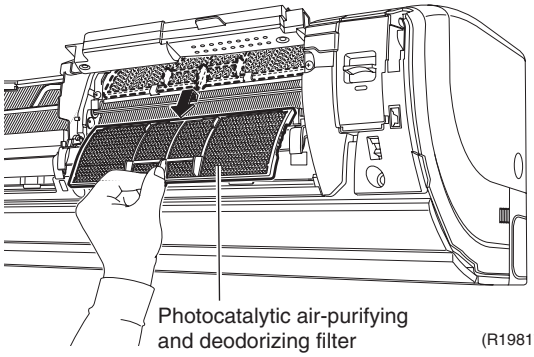
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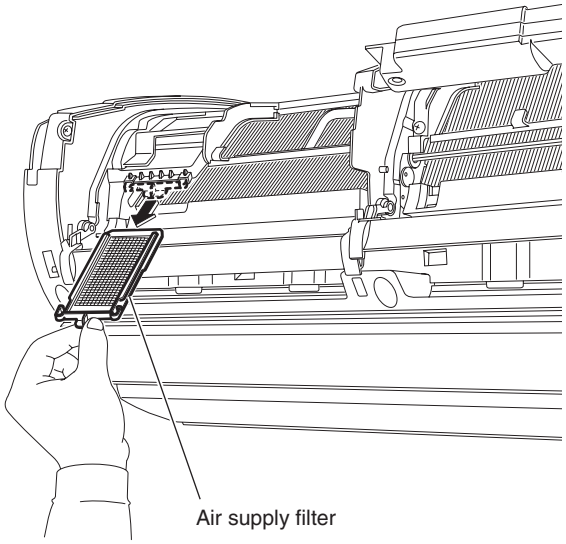
Step	Procedure	Points
1. Remove the streamer unit.	 (R19808)	■ The streamer unit can be removed without removing the front panel.
1 Remove the streamer unit.		
2. Remove the dust box.		
1 Slide the right and left knobs on the dust box inward and remove the dust box.	 (R19809)	
2 Slide the cover to the left and unlock it. 3 Turn the cover and open the dust box.	 (R19810)	
4 Pull out the dust brush.	 (R19811)	

3. Filters

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 air filter.	 (R19813)	
1 Pull down the filter holding frame.		
2 Turn up the display unit.	 (R19814)	
3 Pull the air filter downward and remove it.	 (R19815)	
4 Remove the other air filter in the same way.		
2. Remove the photocatalytic air-purifying and deodorizing filter.	 (R19817)	
1 Remove the photocatalytic air-purifying and deodorizing filter.		

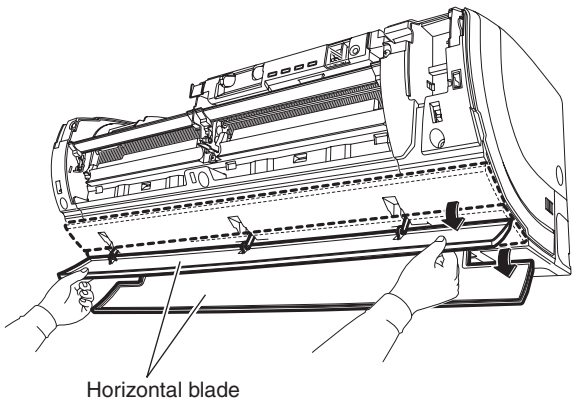
Step	Procedure	Points
3. Remove the air supply filter.	 (R19818)	
1 Remove the air supply filter.		

4. Front Grilles / Horizontal Blades

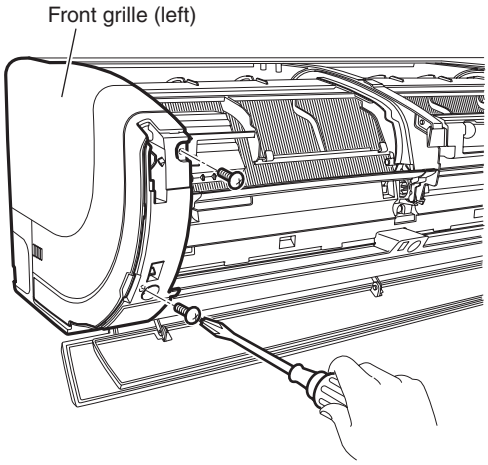
Warning

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

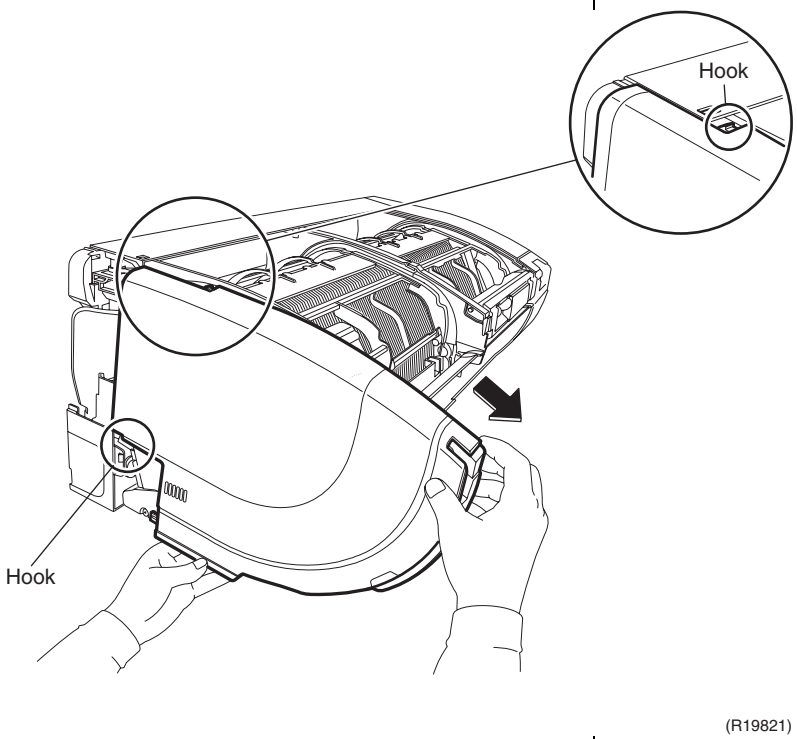
Step	Procedure	Points
1. Remove the front grille (left).		
1	Open the 2 horizontal blades.	
2	Remove the 2 screws of the front grille (left).	
3	Unfasten the 2 hooks and remove the front grille (left).	



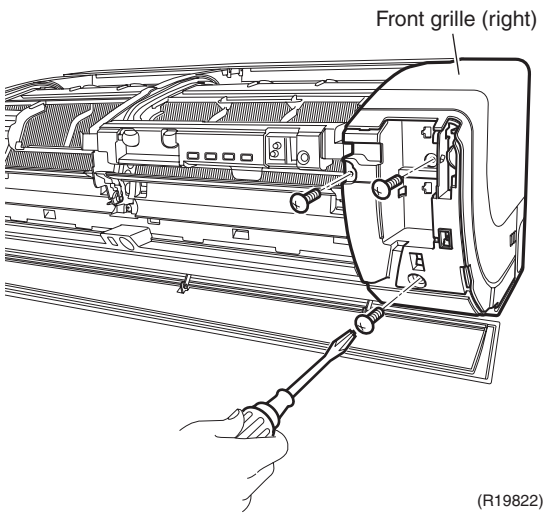
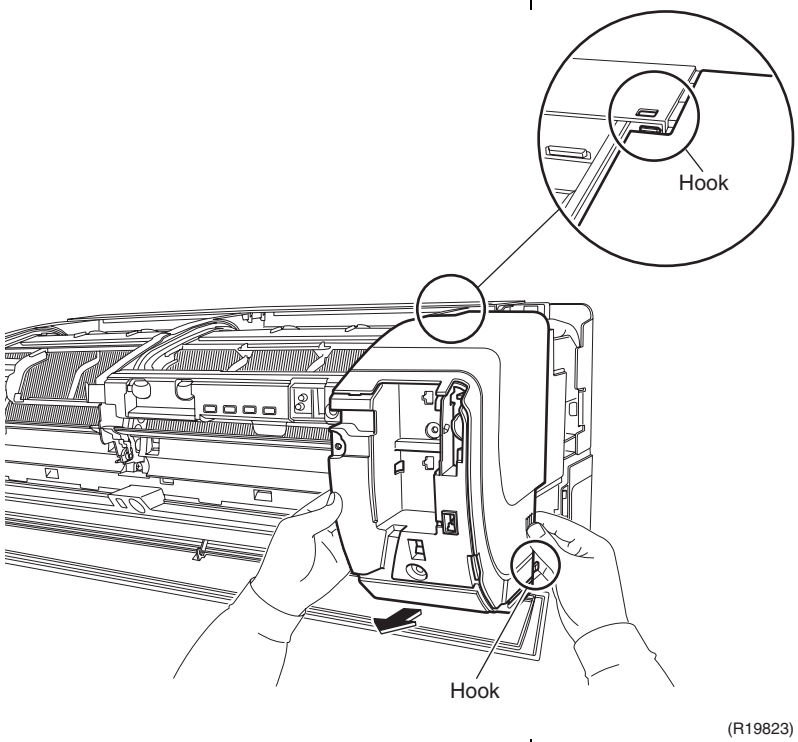
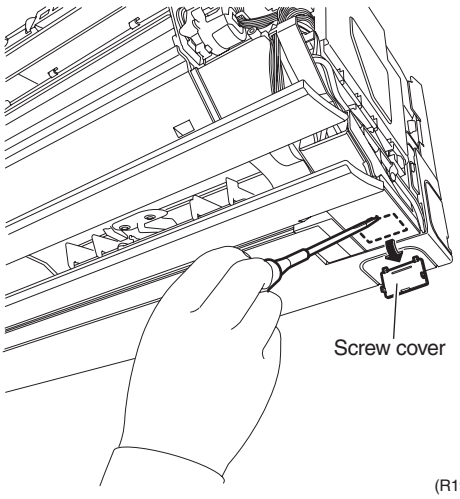
(R19819)



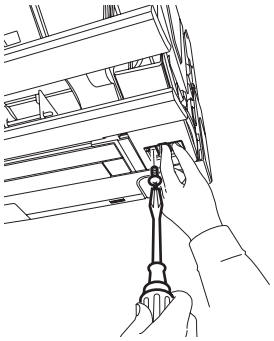
(R19820)



(R19821)

Step	Procedure	Points
2. Remove the front grille (right).		
1 Remove the 3 screws of the front grille (right).		
2 Unfasten the 2 hooks and remove the front grille (right).		
3. Remove the front grille (bottom).		
1 Remove the screw cover with a flat head screwdriver.		

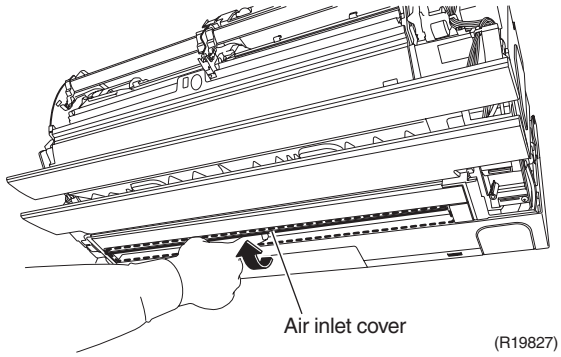
Step	Procedure	Points
2	Remove the screw and remove the service cover ASSY.	


(R19825)



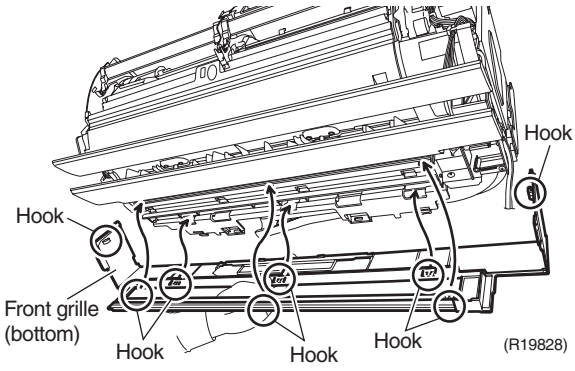
(R19826)

3	Open the air inlet cover.	

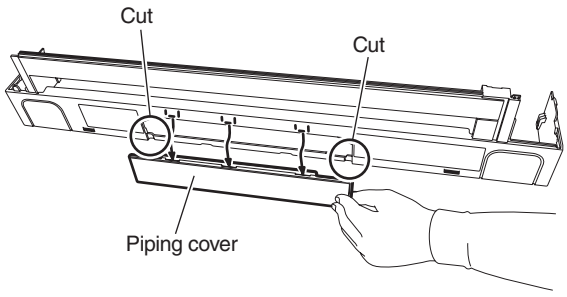


(R19827)

4	Unfasten the 8 hooks and remove the front grille (bottom).	

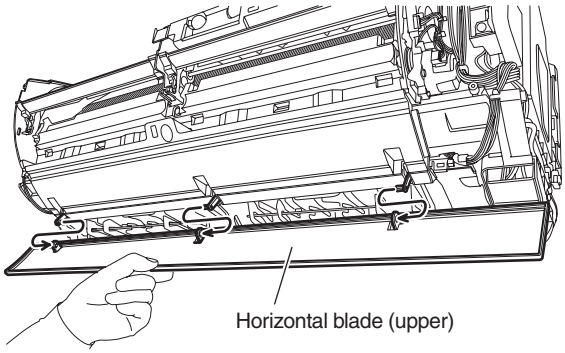
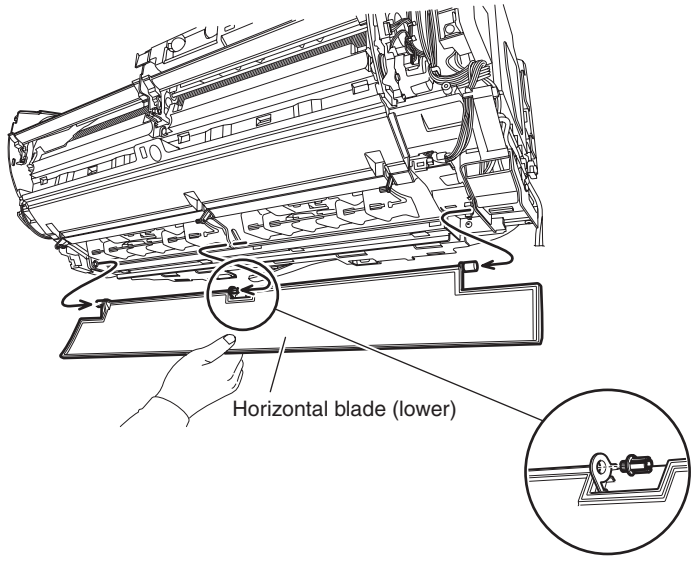
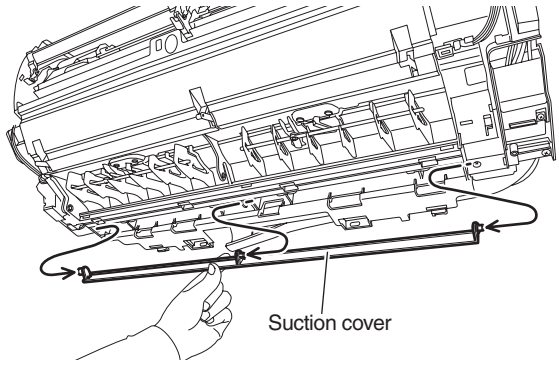


(R19828)



(R19829)

■ If piping work is difficult, remove the piping cover and cut the front grille (bottom) to expand the opening.

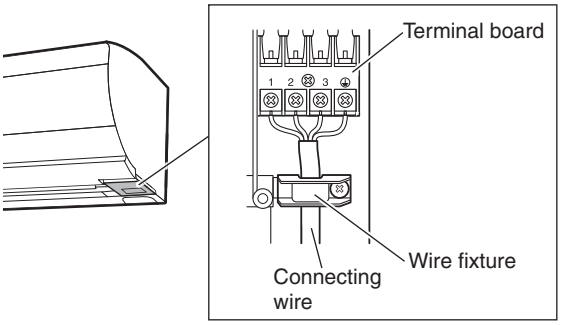
Step	Procedure	Points
4. Remove the horizontal blades.		
1 Release the center shaft of the horizontal blade (upper). 2 Release the left and right shafts and remove the horizontal blade (upper). 3 Release the shaft of the horizontal blade (lower) in the same way. 4 Remove the horizontal blade (lower).	 (R19830)  (R19831)	
5. Remove the suction cover.		
1 Release the shafts of the suction cover in the order of right, center, and left and remove the suction cover.	 (R19832)	

5. Electrical Box / PCBs

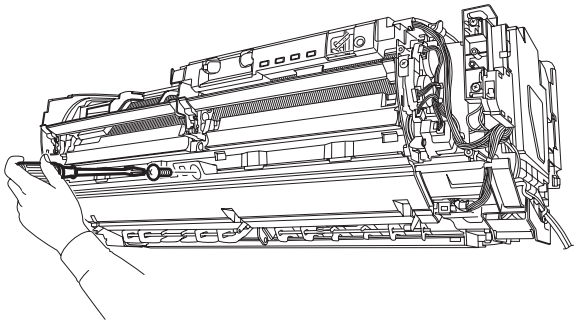
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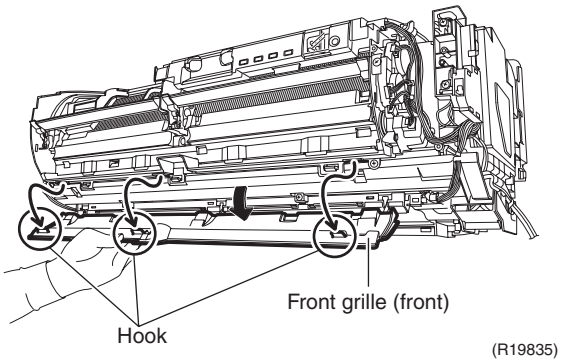
- **Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.**

Step	Procedure	Points
1. Disconnect the connecting wires.		
1	Remove the screw and remove the wire fixture.	
2	Remove the 4 screws on the terminal board and disconnect the connecting wire.	
2. Remove the electrical box.		
1	Remove the screw.	
2	Unfasten the 3 hooks.	
3	Remove the front grille (front).	
4	Unfasten the hook and remove the shield plate.	

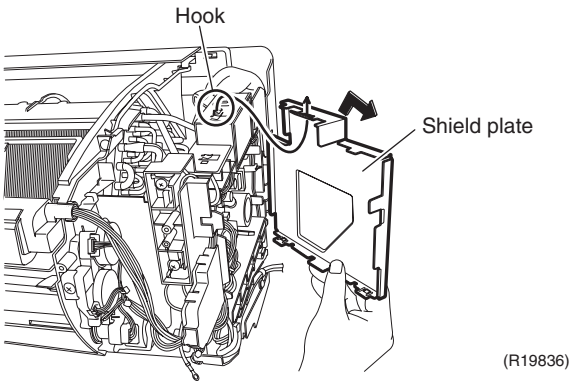


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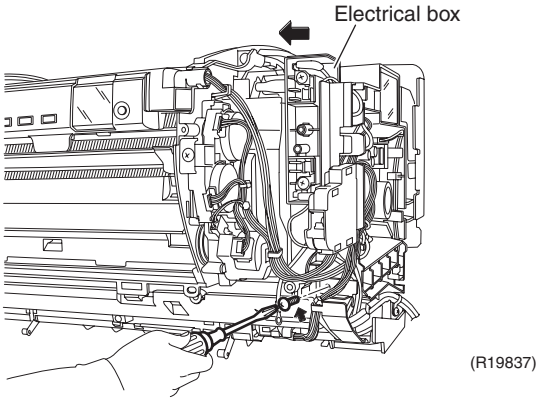
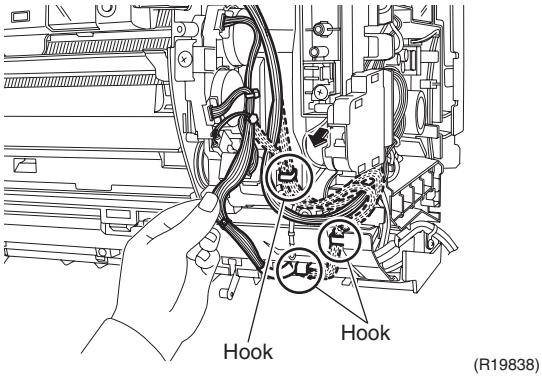
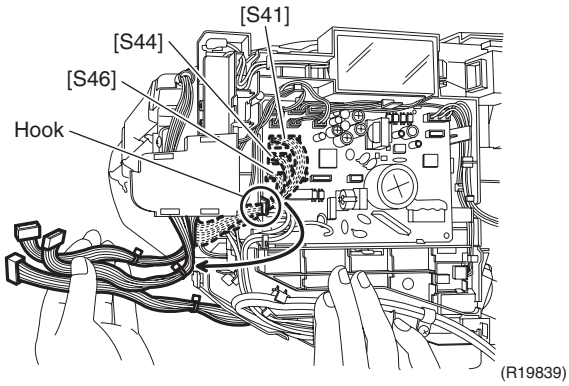
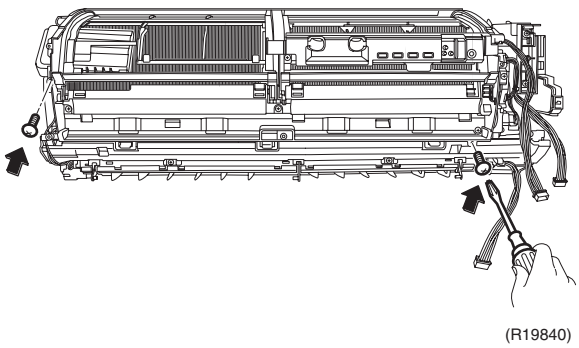

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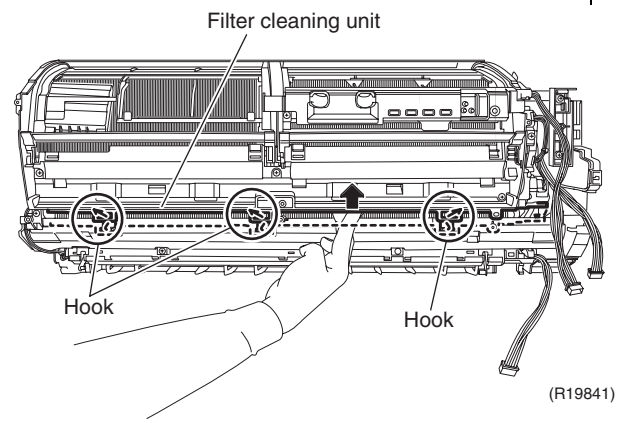
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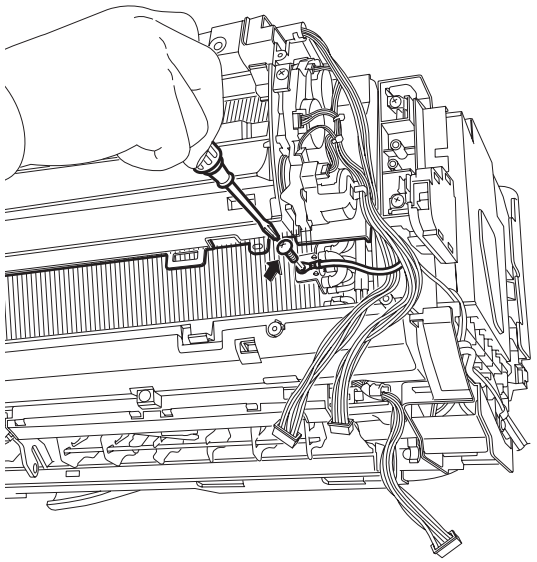


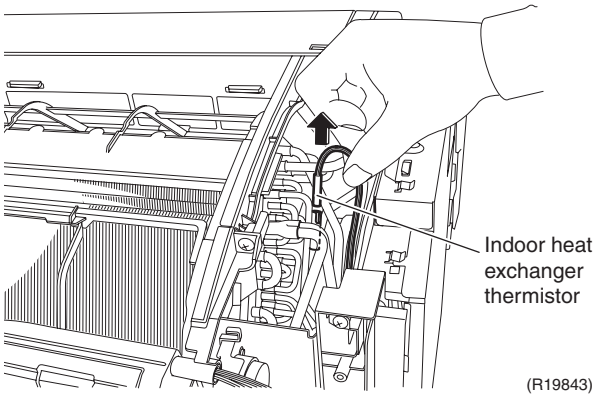
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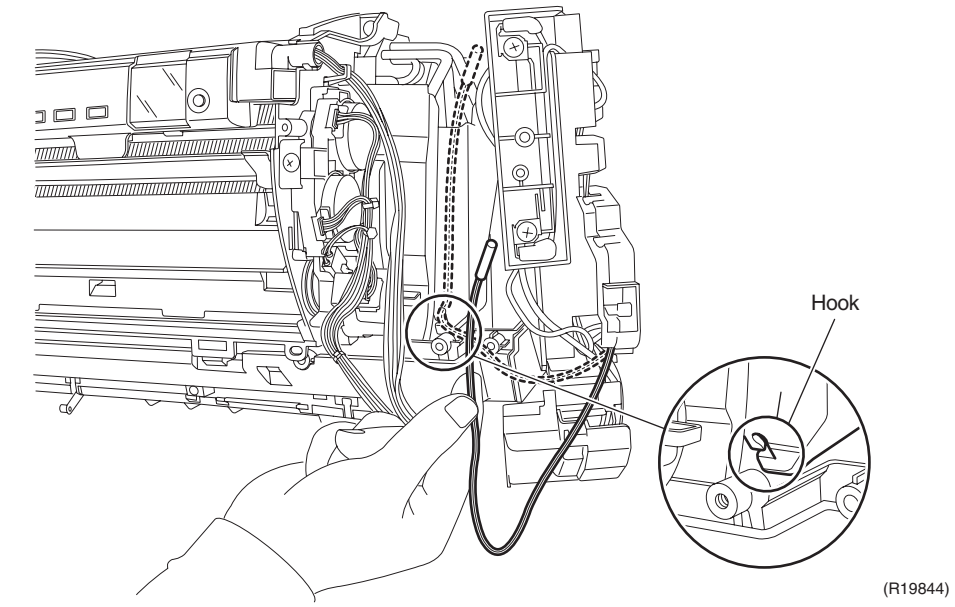
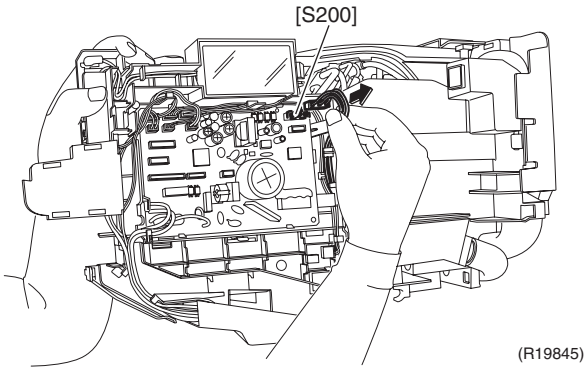
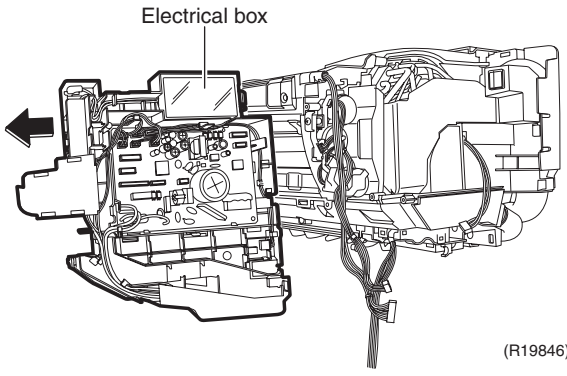
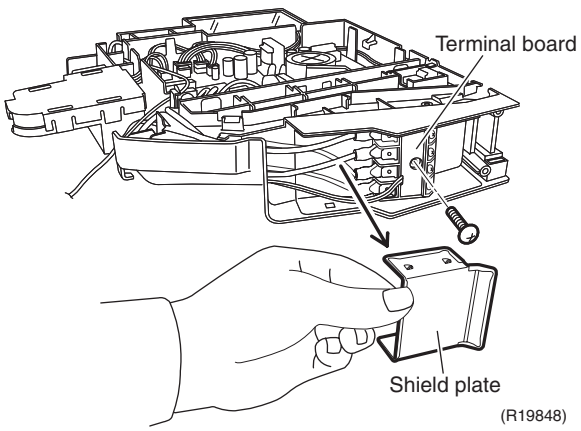
Step	Procedure		Points
5	Remove the screw and slightly draw out the electrical box.		
6	Release the harnesses from the 3 hooks.		
7	Disconnect the connectors [S41] [S44] [S46] and release the harnesses from the hook.		[S41]: swing motors, humidity sensor PCB for humidifying [S44]: brush motor, filter motors, limit switch for brush [S46]: signal receiver / display PCB
8	Remove the 2 screws.		

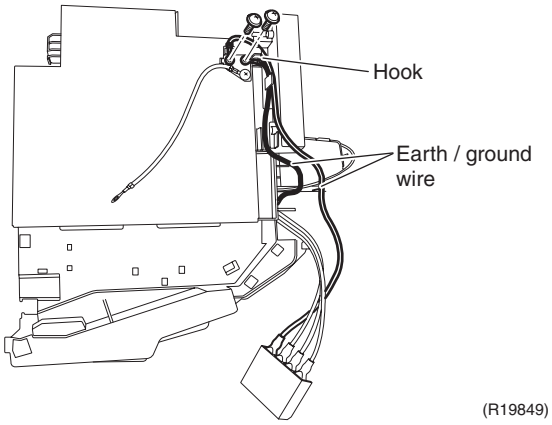
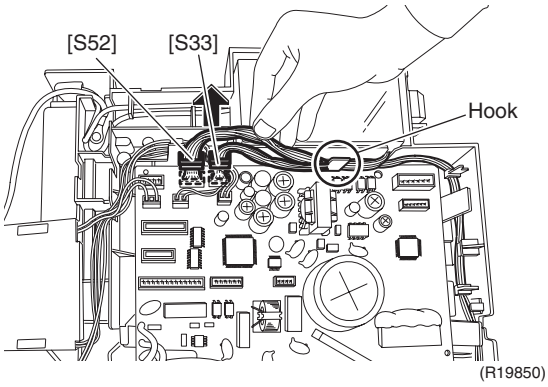
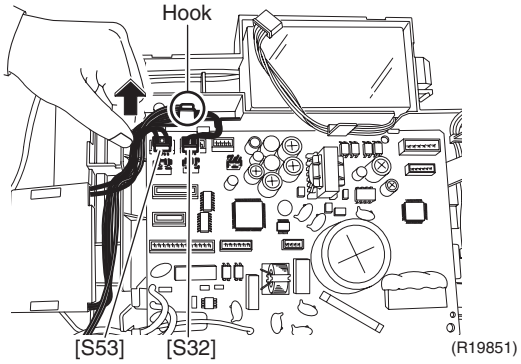
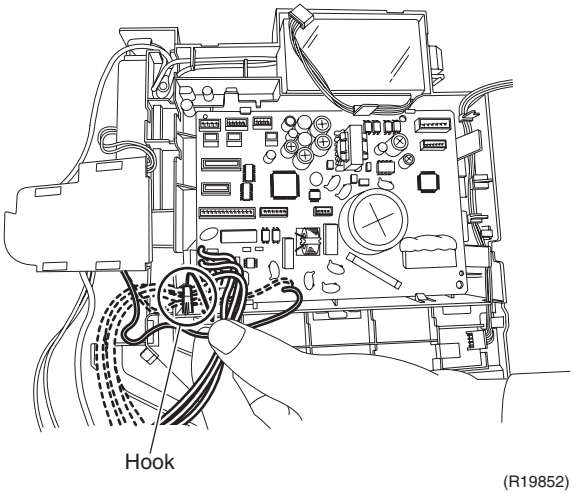
Step	Procedure	Points
9	Unfasten the 3 hooks and lift the filter cleaning unit.	
10	Remove the earth / ground screw.	
11	Detach the indoor heat exchanger thermistor.	

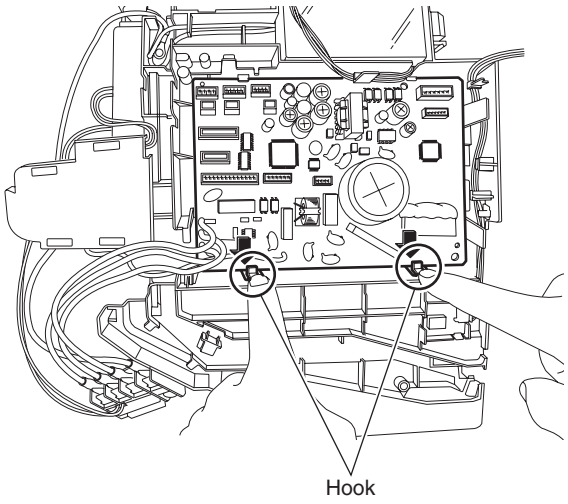
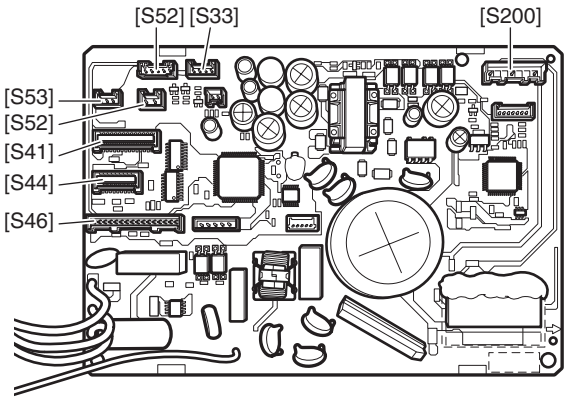
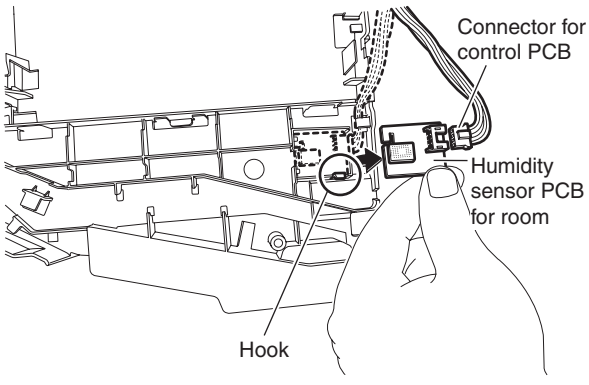


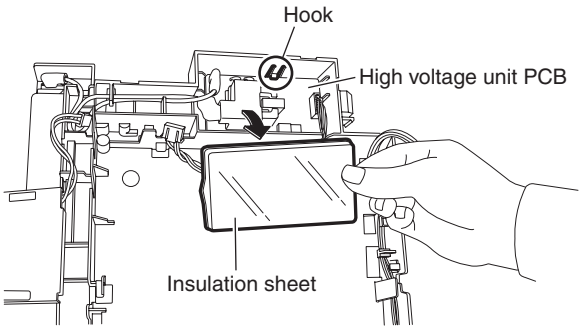
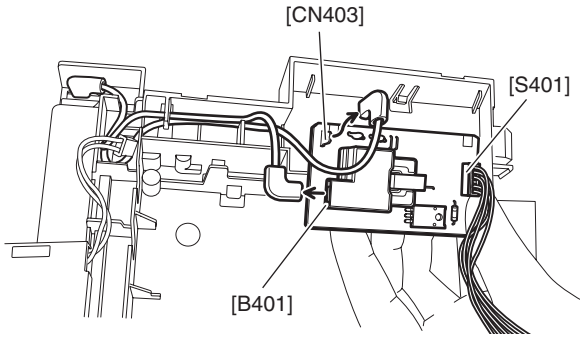
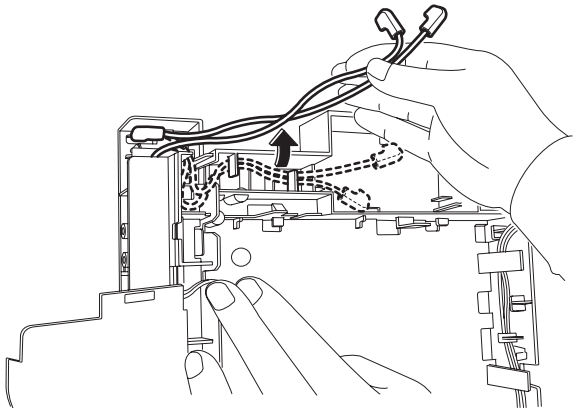
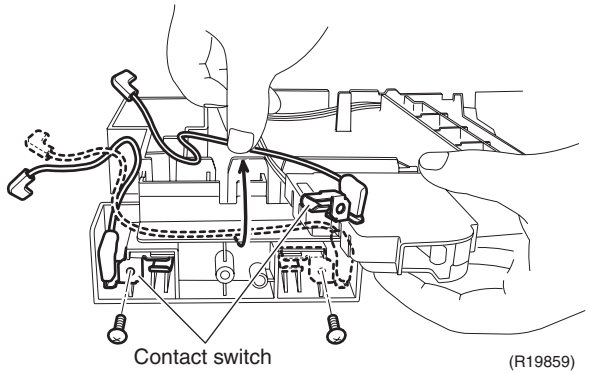


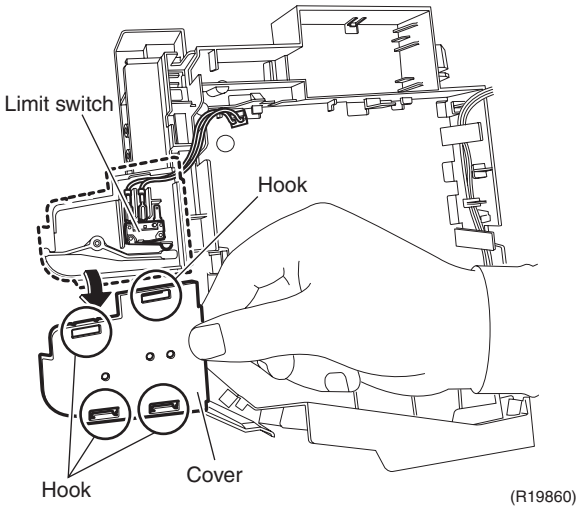
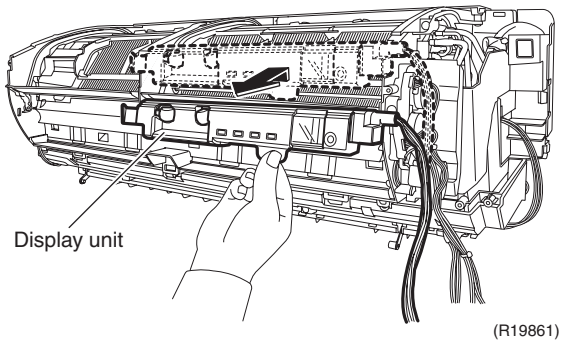
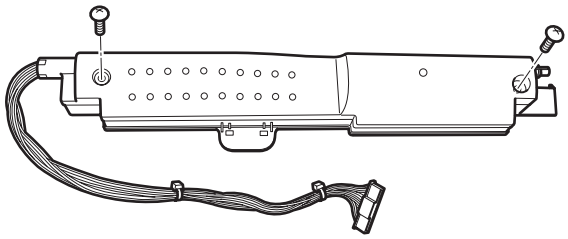
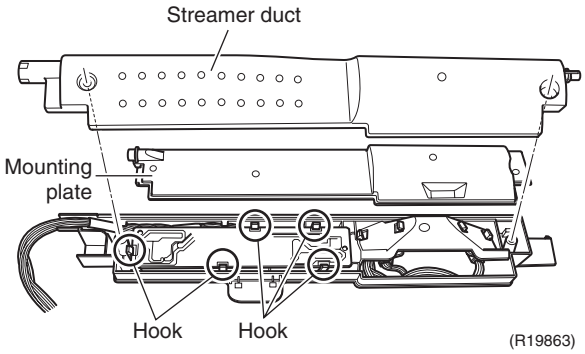


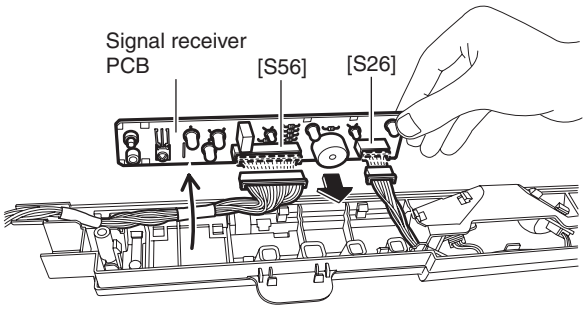
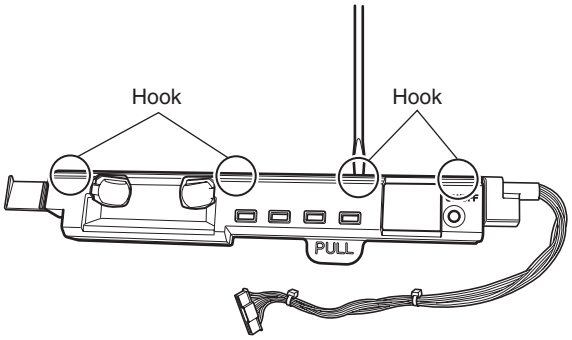
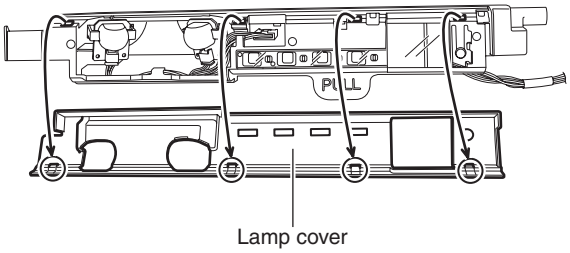
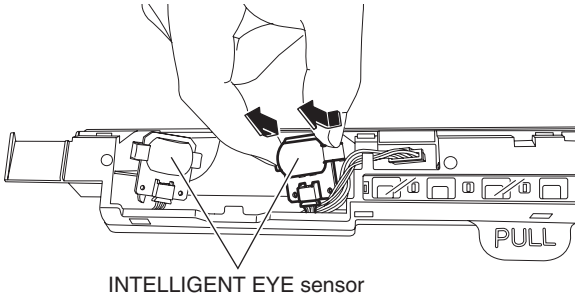
Step	Procedure	Points
12	Release the harness of the indoor heat exchanger thermistor from the hook and draw the electrical box a little.	 (R19844)
13	Disconnect the connector [S200].	[S200]: fan motor  (R19845)
14	Remove the electrical box.	 (R19846)
3. Remove the control PCB.		
1	Remove the shield plate.	 (R19848)
2	Remove the screw and remove the terminal board.	

Step	Procedure		Points
3	Remove the 2 screws and remove the earth / ground wires from the hook.		
4 5	Disconnect the connectors [S33] [S52]. Release the harnesses from the hook.		[S33]: humidity sensor PCB for room [S52]: high voltage unit PCB
6 7	Disconnect the connectors [S32] [S53]. Release the harnesses from the hook.		[S32]: indoor heat exchanger thermistor [S53]: limit switch for streamer
8	Release the harnesses for the terminal board from the hook.		

Step	Procedure		Points
9	Unfasten the 2 hooks and remove the control PCB.	 (R19853)  (R19854)	[S32]: indoor heat exchanger thermistor [S33]: humidity sensor PCB for room [S41]: swing motors, humidity sensor PCB for humidifying [S44]: brush motor, filter motors, limit switch for brush [S46]: signal receiver / display PCB [S52]: high voltage unit PCB [S53]: limit switch for streamer [S200]: fan motor
4. Remove the humidity sensor PCB for room.			
1	Unfasten the hook and remove the humidity sensor PCB for room.	 (R19855)	
2	Disconnect the connector.		

Step	Procedure	Points
5. Remove the high voltage unit PCB.		
1 Remove the insulation sheet.		
2 Unfasten the hook and remove the high voltage unit PCB.	 (R19856)	
3 Disconnect the connectors [S401] [B401] [CN403] and remove the high voltage unit PCB.	 (R19857)	[S401]: for control PCB [B401][CN403]: streamer
4 Release the harnesses from the hooks.	 (R19858)	
5 Remove the 2 screws and remove the contact switches.	 (R19859)	

Step	Procedure	Points
6. Remove the limit switch.		
1 Unfasten the 4 hooks and remove the cover. 2 Remove the limit switch.		
7. Remove the signal receiver / display PCB.		
1 Remove the display unit from the filter cleaning unit.		
2 Remove the 2 screws on the back of the display unit.		
3 Remove the streamer duct and the mounting plate. 4 Unfasten the 5 hooks of the signal receiver / display PCB.		

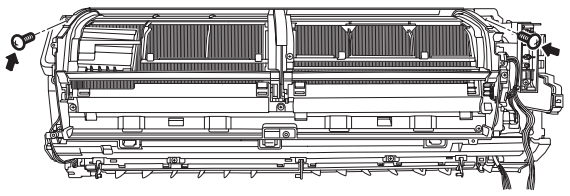
Step	Procedure		Points
5	Remove the signal receiver / display PCB.	 (R19864)	[S26]: INTELLIGENT EYE sensor PCBs [S56]: control PCB
6	Disconnect the connectors [S26] [S56].		
8.	Remove the INTELLIGENT EYE sensors.		
1	Unfasten the 4 hooks and remove the lamp cover.	 (R19865)  (R19866)	
2	Pinch and remove the INTELLIGENT EYE sensors.	 (R19867)	

6. Filter Cleaning Unit

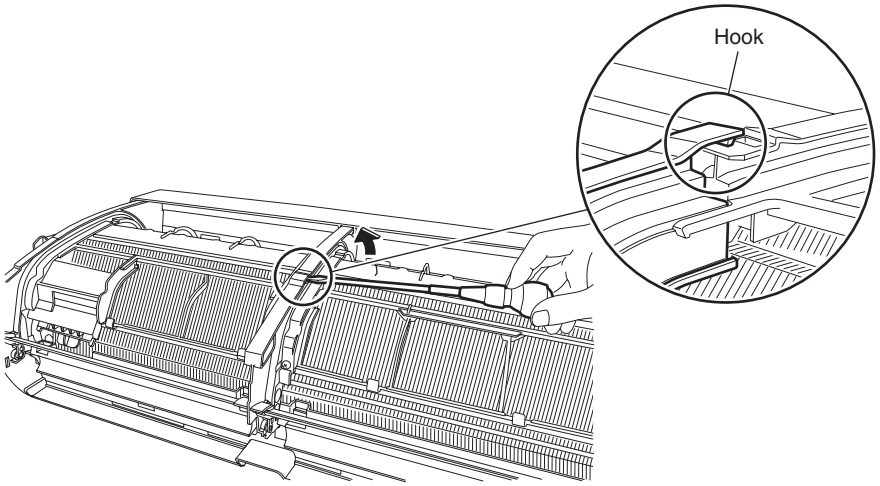
Warning

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

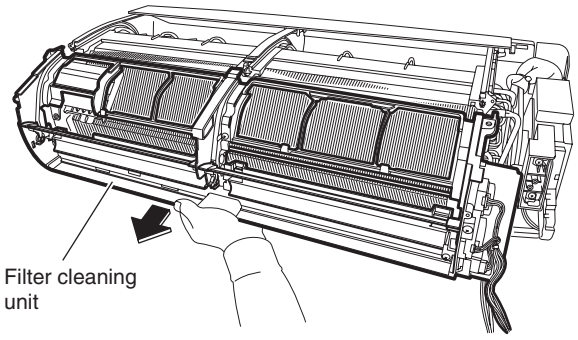
Step	Procedure	Points
1. Remove the cleaning unit.		
1	Remove the 2 screws on the both side.	
2	Unfasten the center hook.	
3	Remove the filter cleaning unit.	
2. Remove the brush motor.		
1	Disconnect the 3 connectors.	



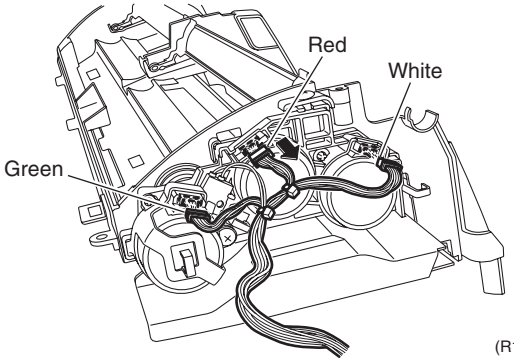
(R19869)



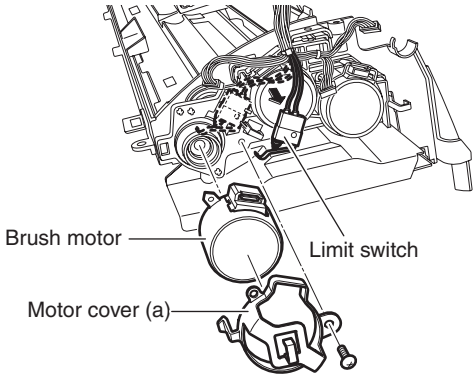
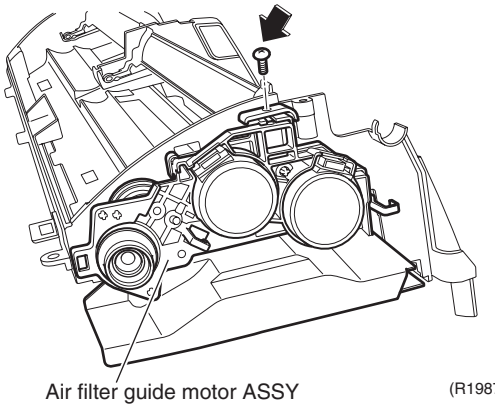
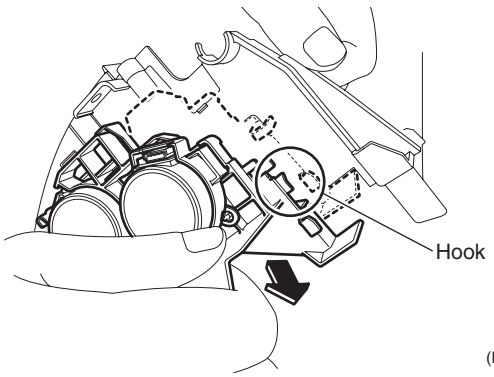
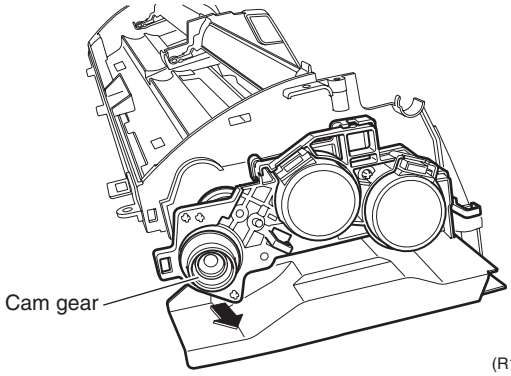
(R19870)

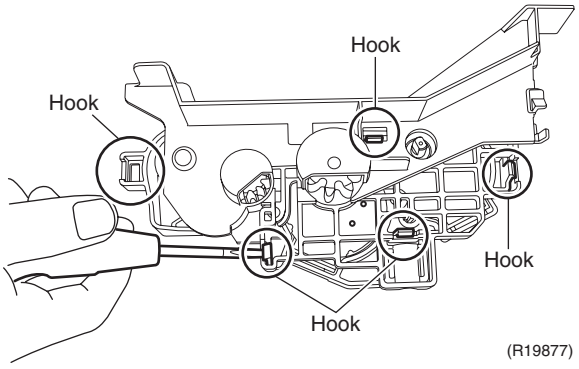
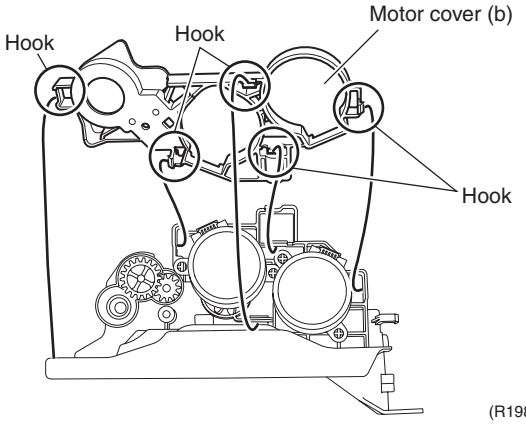
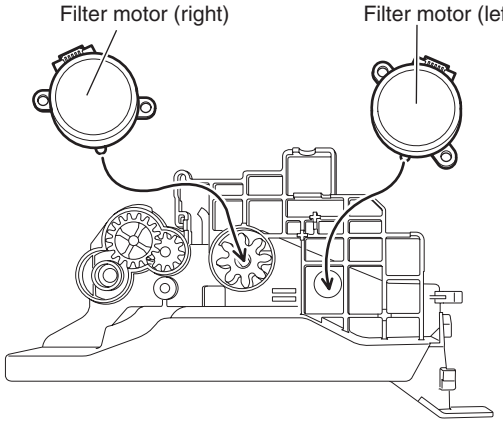
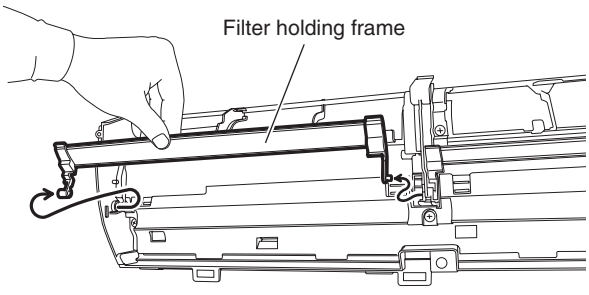


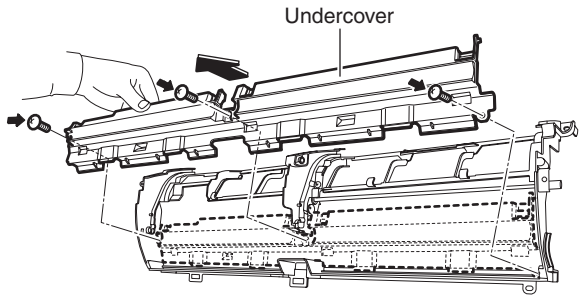
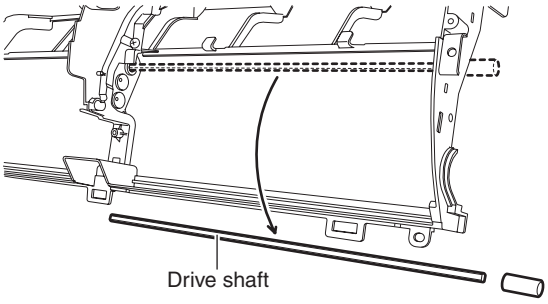
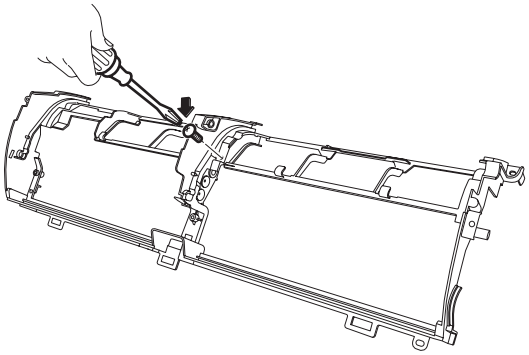
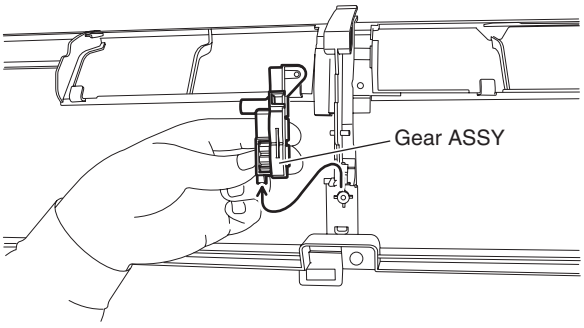
(R19871)



(R19872)

Step	Procedure		Points
2	Remove the screw and remove the motor cover (a).	 (R19873)	
3	Remove the brush motor.		
4	Remove the limit switch.		
3. Remove the filter motors.			
1	Remove the screw.	 (R19874)	
2	Unfasten the hook and remove the air filter guide motor ASSY.	 (R19875)	
3	Remove the cam gear.	 (R19876)	

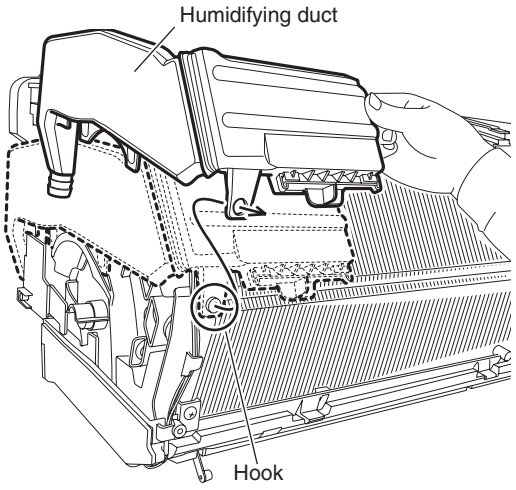
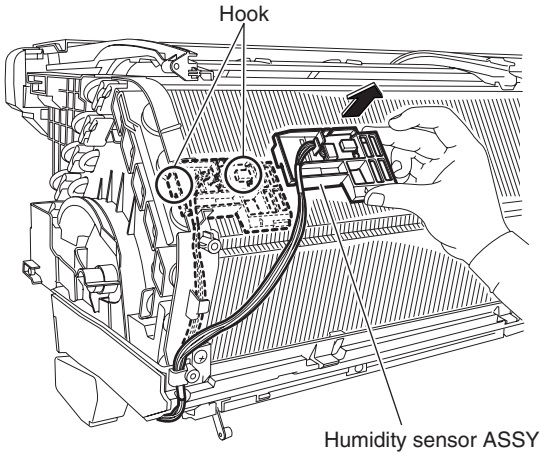
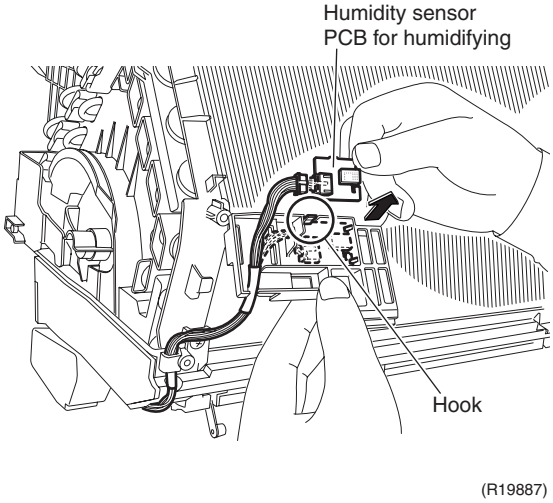
Step	Procedure		Points
4	Unfasten the 5 hooks on the back.	 (R19877)	
5	Remove the motor cover (b).	 (R19878)	
6	Remove the filter motors.	 (R19879)	
4. Remove the peripheral parts.			
1	Release the shafts on the right and left side and remove the filter holding frame.	 (R19880)	

Step	Procedure		Points
2	Remove the 3 screws and remove the undercover.	 (R19881)	
3	Pull out the drive shaft.	 (R19882)	
4	Remove the screw.	 (R19883)	
5	Unfasten the hook and remove the gear ASSY.	 (R19884)	

7. Humidifying Duct

Warning

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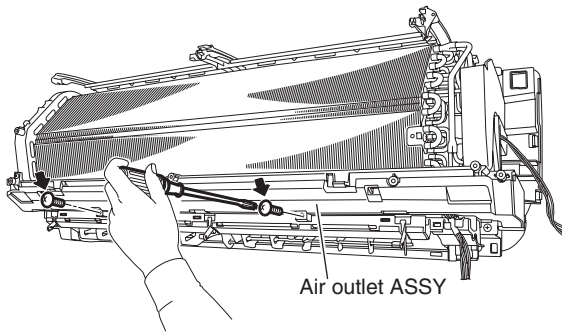
Step	Procedure	Points
1. Remove the humidifying duct.		
1 Unfasten the hook and remove the humidifying duct.		
2. Remove the humidity sensor PCB for humidifying.		
1 Unfasten the 2 hooks on the back and remove the humidity sensor ASSY.		
2 Unfasten the hook and remove the humidity sensor PCB for humidifying.		
3 Disconnect the connector.		

8. Swing Motors

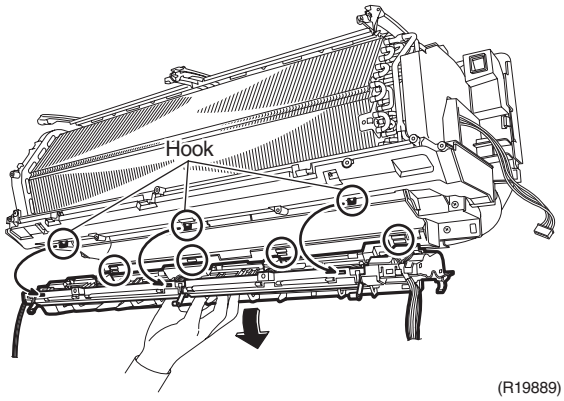
Warning

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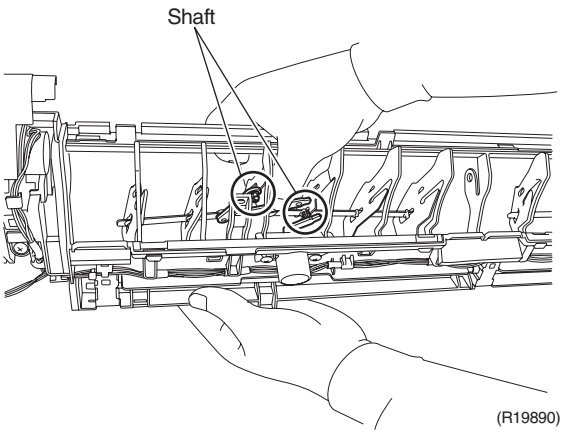
Step	Procedure	Points
1. Remove the air outlet ASSY.		
1	Remove the 2 screws of the air outlet ASSY.	
2	Unfasten the lower 4 hooks and upper 3 hooks.	
3	Remove the air outlet ASSY.	
2. Remove the vertical blade ASSY.		
1	Release the 2 shafts of the vertical blade ASSY.	
2	Unfasten the 2 hooks.	



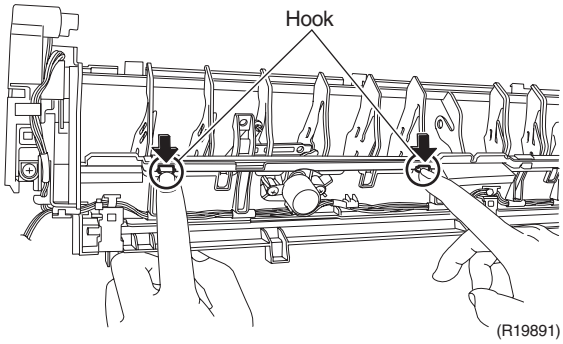
(R19888)



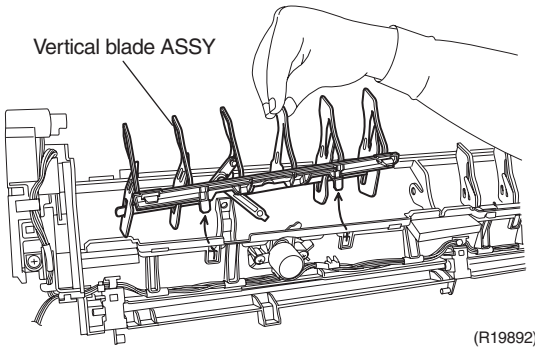
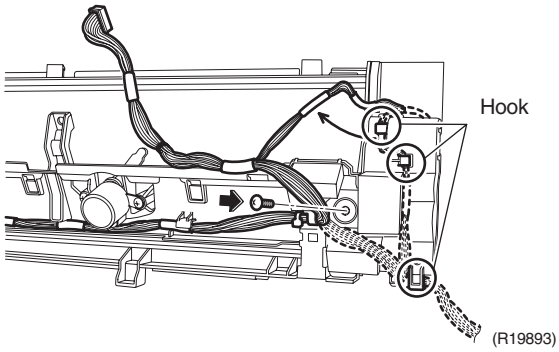
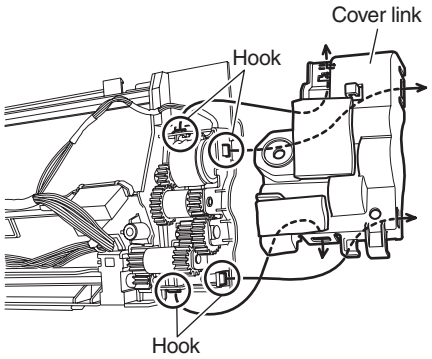
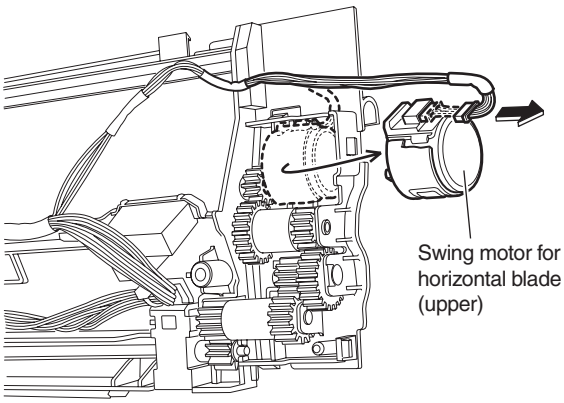
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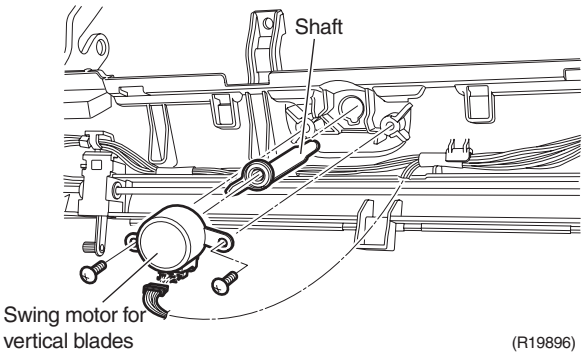
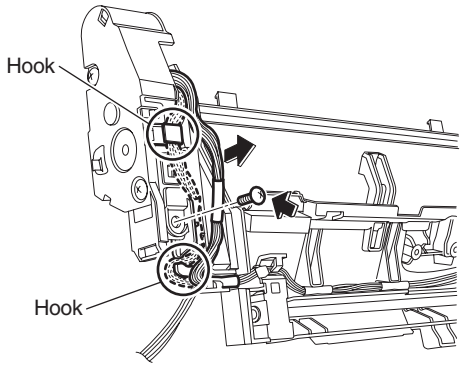
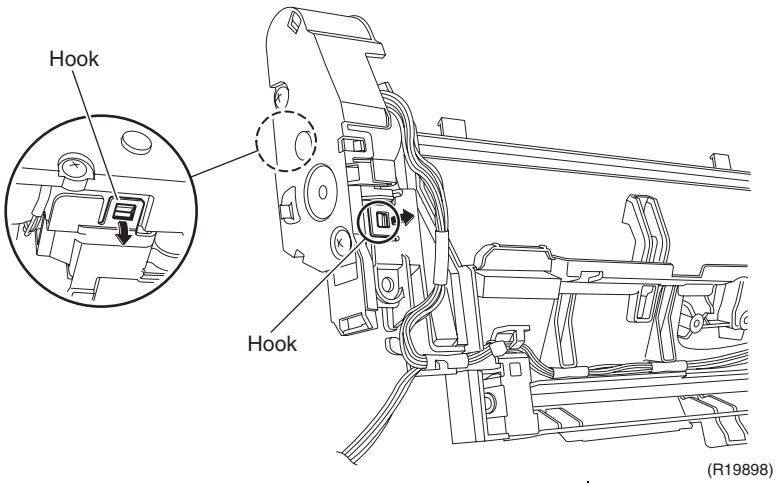
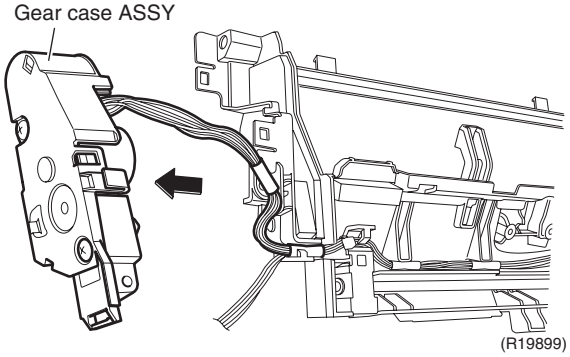


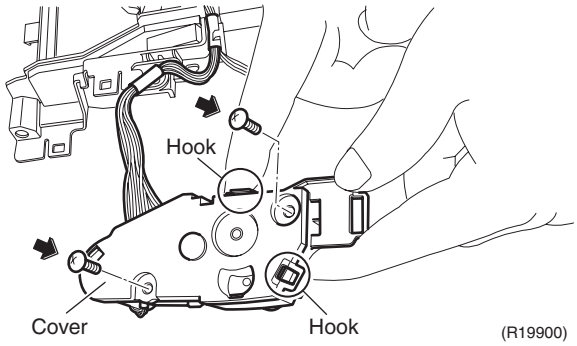
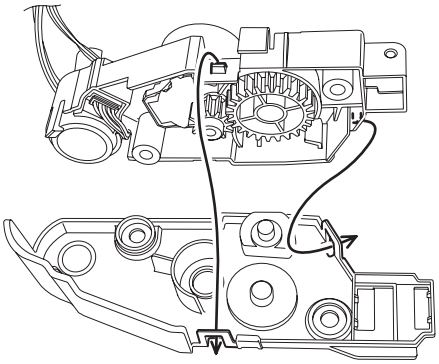
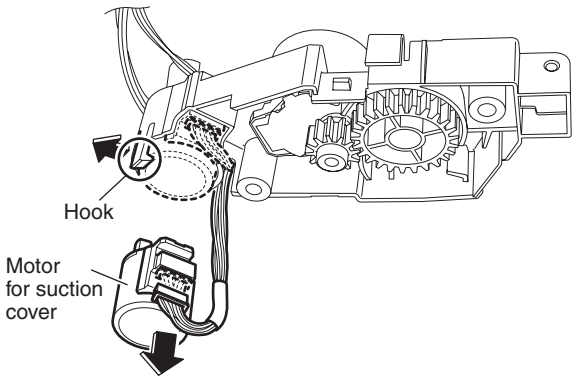
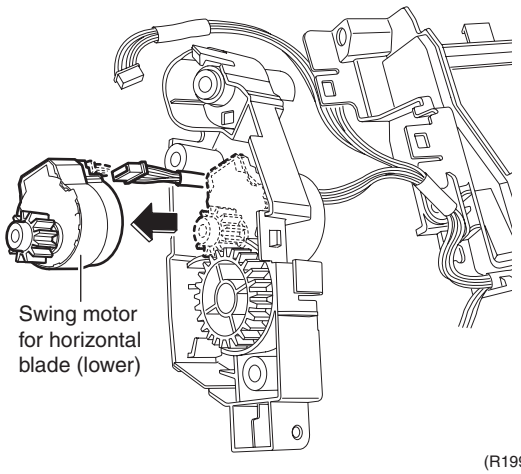
(R19890)



(R19891)

Step	Procedure		Points
3	Remove the vertical blade ASSY.	 (R19892)	
3. Remove the swing motor for horizontal blade (upper).			
1	Remove the screw.	 (R19893)	
2	Release the harness from the 3 hooks.		
3	Unfasten the 4 hooks and remove the cover link.	 (R19894)	
4	Remove the swing motor for horizontal blade (upper).	 (R19895)	
5	Disconnect the connector.		■ Connector color: red

Step	Procedure	Points
4. Remove the swing motors for vertical blades.		■ Connector color: Right → green Left → white
1 Remove the 2 screws and remove the swing motor for vertical blades. 2 Disconnect the connector. 3 Remove the shaft. 4 Remove the other swing motor for vertical blades in the same way.		
5. Remove the swing motor for horizontal blade (lower) and the motor for suction cover.		
1 Remove the screw. 2 Release the harness from the 2 hooks. 3 Unfasten the 2 hooks and remove the gear case ASSY.	 	

Step	Procedure		Points
4	Remove the 2 screws.	 (R19900)	
5	Unfasten the 2 hooks and remove the cover.	 (R19901)	
6	Unfasten the hook and remove the motor for suction cover.	 (R19902)	
7	Disconnect the connector.		■ Connector color: red
8	Remove the swing motor for horizontal blade (lower).	 (R19903)	
9	Disconnect the connector.		■ Connector color: green

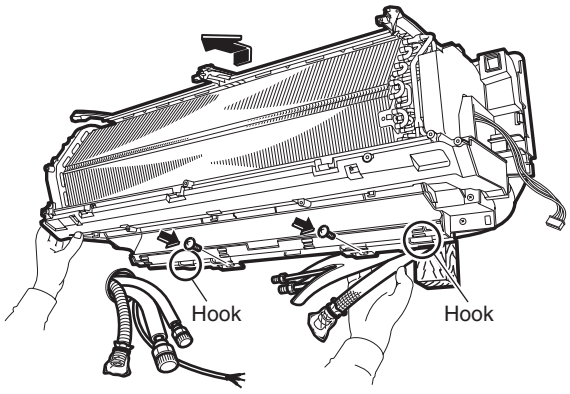
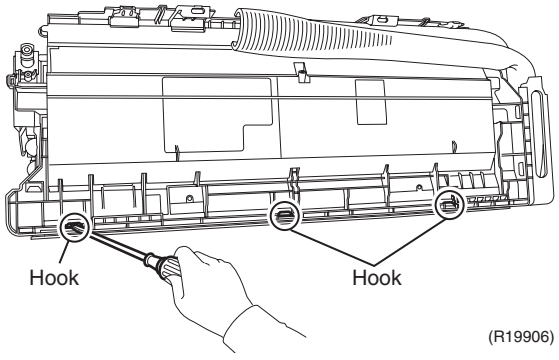
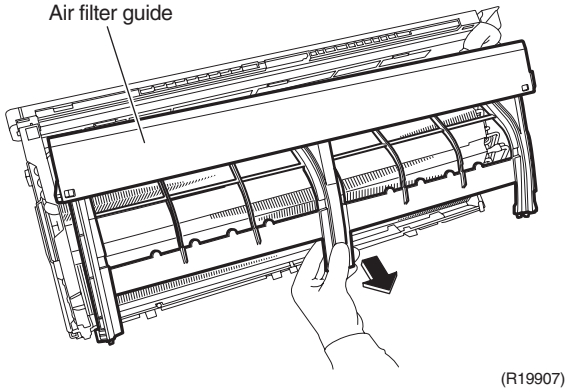
9. Indoor Heat Exchanger

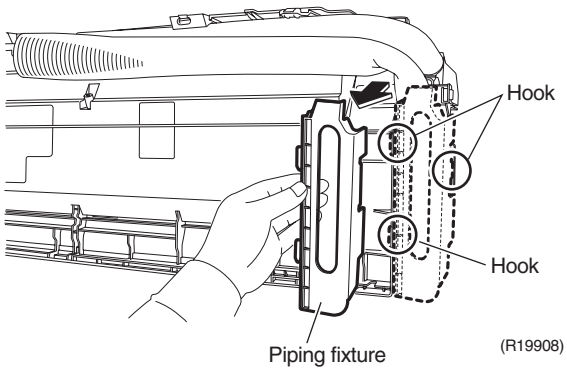
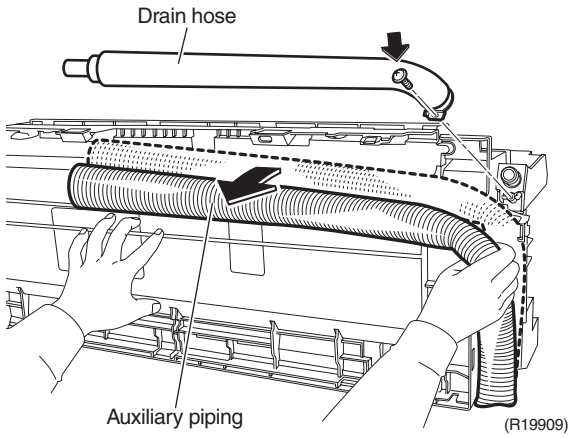
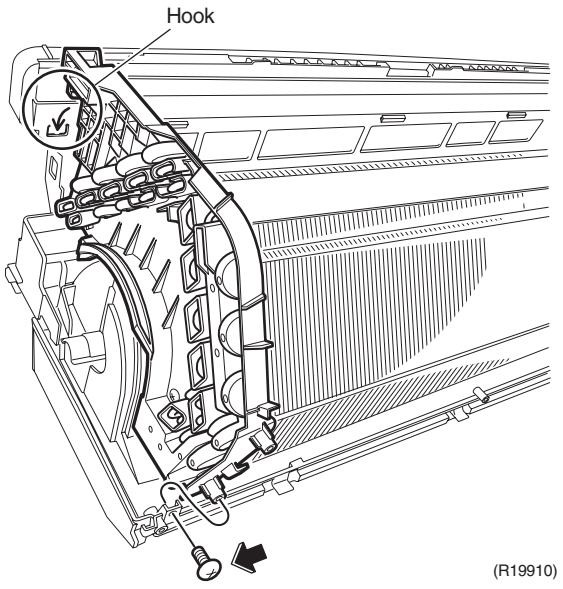
Warning

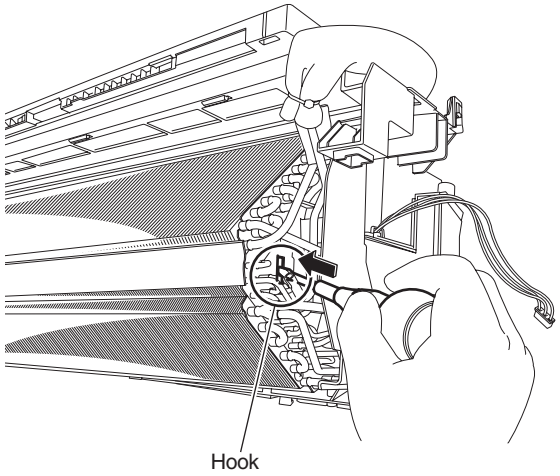
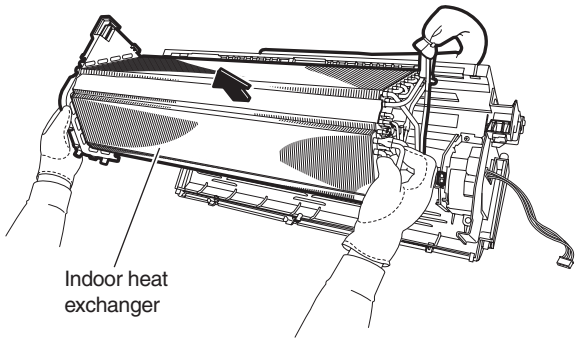
- **Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.**
- **In pump-down work, be sure to stop the compressor before disconnecting the refrigerant pipe. If the refrigerant pipe is disconnected with the compressor operating and the stop valve open, 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. Detach the indoor unit.		
1 Remove the 2 screws which fix the indoor unit to the installation plate. 2 Unfasten the 2 hooks and detach the indoor unit from the installation plate.		
2. Remove the air filter guide.		
1 Unfasten the 3 hooks and remove the air filter guide.		

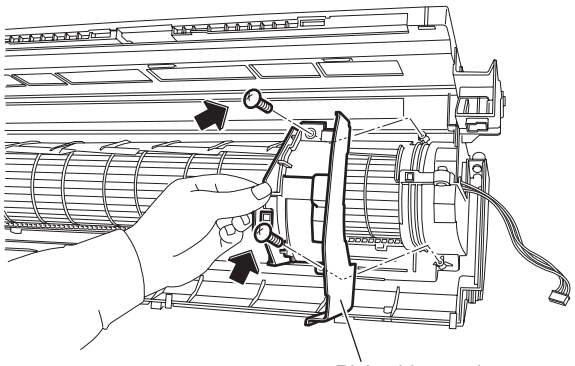
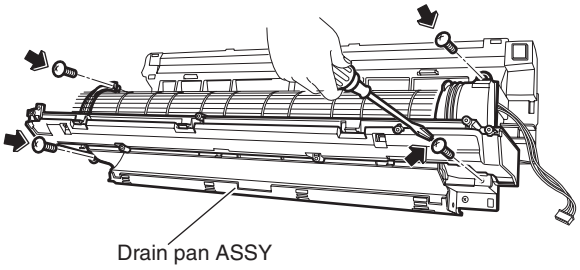
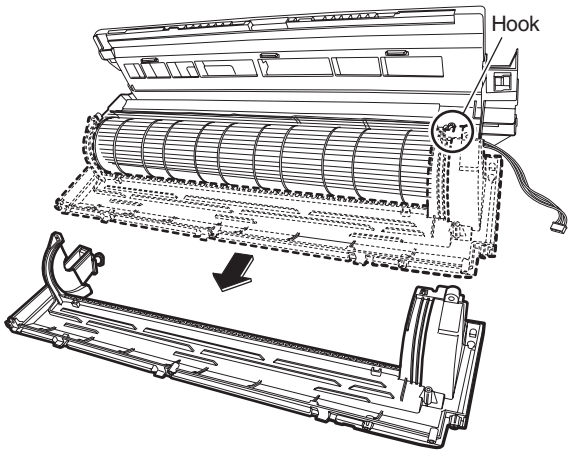
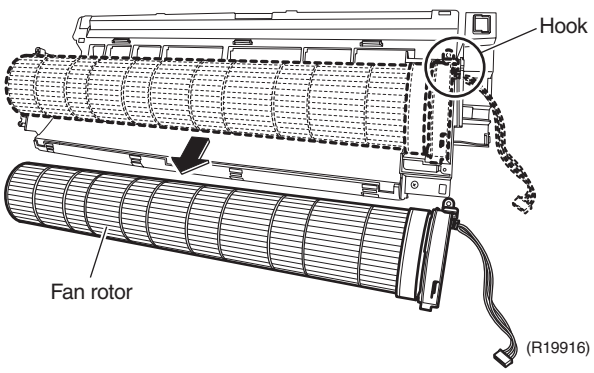
Step	Procedure	Points
3. Remove the indoor heat exchanger.		
1 Unfasten the 3 hooks and remove the piping fixture.		
2 Slightly widen the auxiliary piping. 3 Remove the screw and remove the drain hose.		
4 Remove the screw. 5 Unfasten the hook while pushing from behind.		

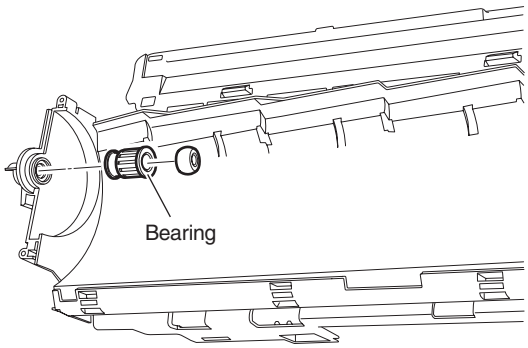
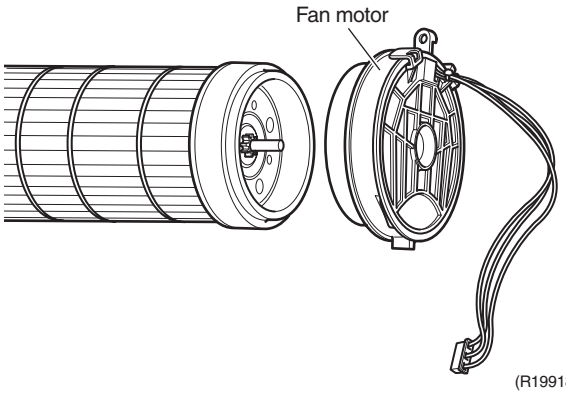
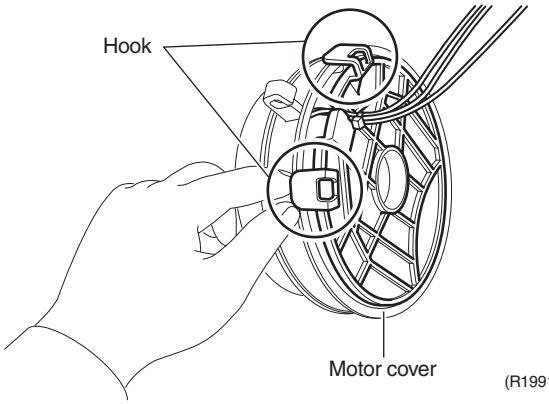
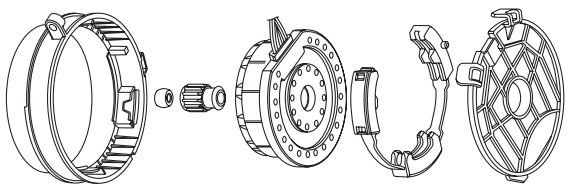
Step	Procedure		Points
6	Unfasten the hook and remove the indoor heat exchanger.	 (R19911)  (R19912)	

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 2 screws and remove the right side panel.	 (R19913)	
2	Remove the 4 screws of the drain pan ASSY.	 (R19914)	
3	Unfasten the hook and remove the drain pan ASSY.	 (R19915)	
4	Release the harness from the hook.		
5	Lift up and remove the fan rotor.	 (R19916)	

Step	Procedure		Points
6	Remove the bearing.	 (R19917)	
7	Pull out the fan motor.	 (R19918)	■ The magnet of the 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.
8	Unfasten the 2 hooks and remove the motor cover.	 (R19919)	
		 (R20348)	

Revision History

Month / Year	Version	Revised contents
03 / 2014	Si041361E	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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03/2014 AK.B