



Si041144

REMOVAL PROCEDURE



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

5.0/6.0/7.1 kW Class

15000/18000/24000/28000 Btu/h Class



Indoor Unit



Inverter/Non-Inverter



Wall Mounted Type



Service Manual

Removal Procedure

Indoor Unit

Applicable Models

●Cooling Only

FTKD24HV2S

FTKS24HV2S

FTKS50LVMA
FTKS60LVMA
FTKS71LVMA

FT24LV2S
FT28LV2S

FTE24NV2S

AT24KV2S

FT60JV1V

FT60MV16

●Heat Pump

FTXS15LVJU
FTXS18LVJU
FTXS24LVJU

FTXS50LVMA
FTXS60LVMA
FTXS71LVMA

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Note:

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

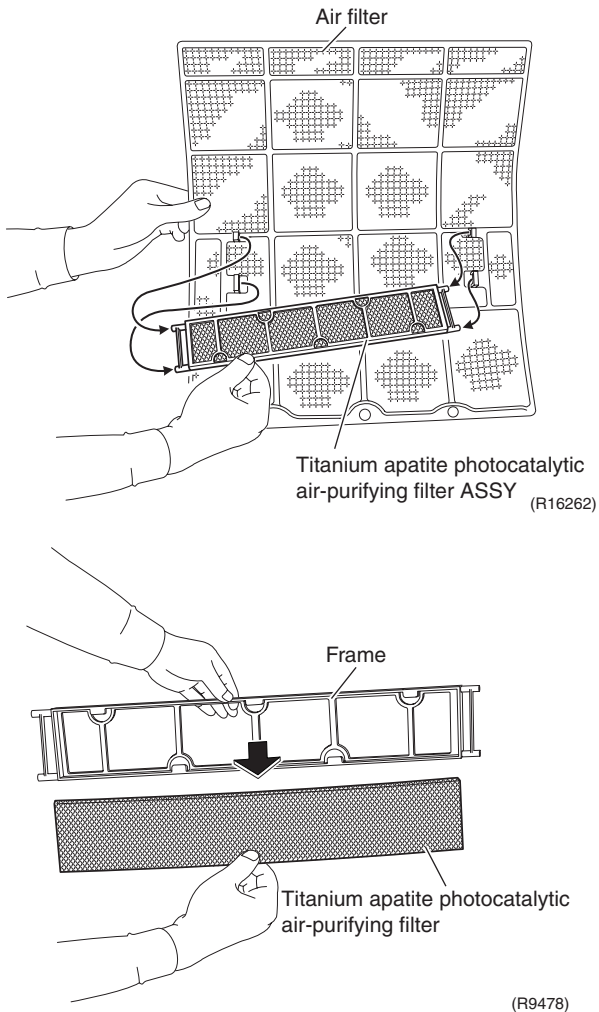
1. Removal of Air Filters / Front Panel

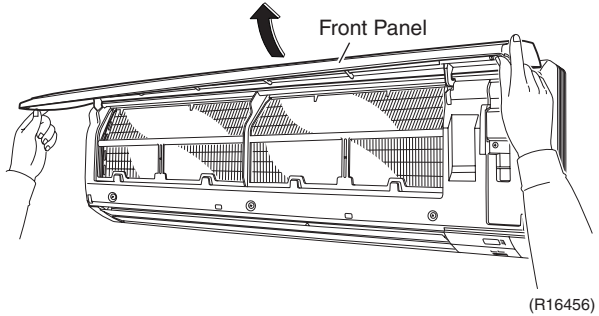
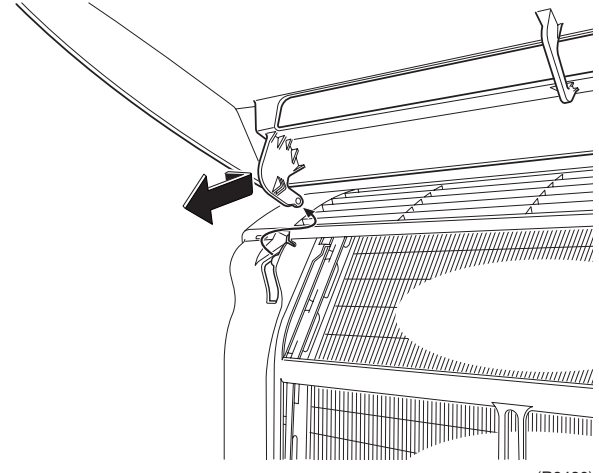
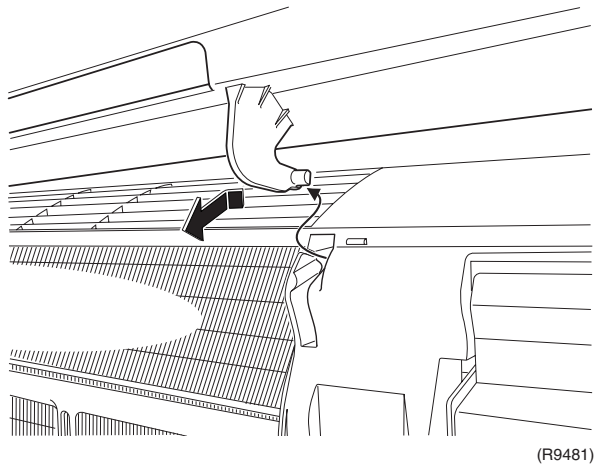
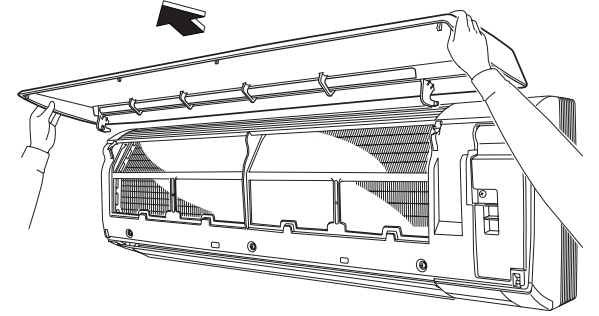
Procedure



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

Step	Procedure	Points
<p>1. Appearance features</p>		<p>Warning Dangerous: High voltage A high voltage is applied to all the electric circuits of this product including thermistors.</p> <ul style="list-style-type: none"> ■ When the signal receiver catches a signal from the remote controller, the receiving tone sounds and the operation lamp blinks immediately to confirm the signal reception. ■ When the [ON/OFF] button is kept pressed for 5 seconds, the forced cooling operation is performed for about 15 minutes. ■ Some models have no INTELLIGENT EYE sensor/lamp.
<p>2. Remove the air filters.</p> <p>1 Open the front panel to the position where it stops.</p> <p>2 Slightly push up the center knob of the air filter and unfasten the hooks.</p> <p>3 Pull out the air filter downward and remove it.</p>		<ul style="list-style-type: none"> ■ The 2 filters are interchangeable. ■ The air filter can be set easily by inserting it along the guides. ■ Insert the air filter with the "FRONT" mark faced up. ■ Be sure to insert the hooks (at 2 lower positions) when reassembling the air filter.

Step	Procedure	Points
3. Remove the Titanium apatite photocatalytic air-purifying filters.	 <p data-bbox="794 360 874 389">Air filter</p> <p data-bbox="775 808 1082 869">Titanium apatite photocatalytic air-purifying filter ASSY (R16262)</p> <p data-bbox="804 999 868 1028">Frame</p> <p data-bbox="759 1240 1054 1301">Titanium apatite photocatalytic air-purifying filter</p> <p data-bbox="991 1346 1054 1375">(R9478)</p>	<ul style="list-style-type: none"> <li data-bbox="1094 315 1437 376">■ The right and left filters are interchangeable.

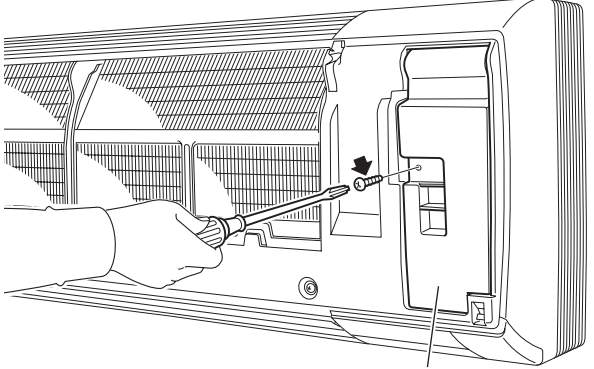
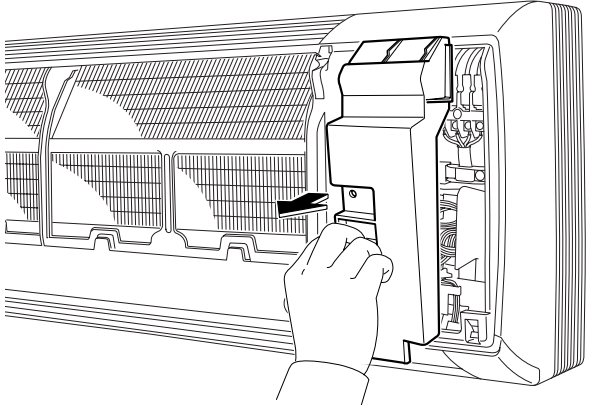
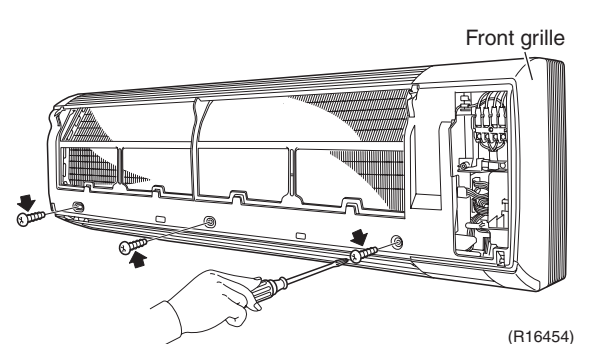
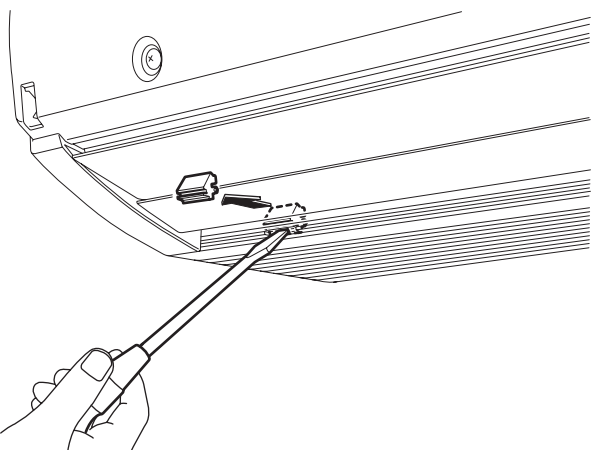
Step	Procedure	Points
4. Remove the front panel.	 <p>(R16456)</p>  <p>(R9480)</p>  <p>(R9481)</p>	<ul style="list-style-type: none"> ■ Slide the front panel from side to side to release each shaft. ■ Align the right and left shafts with grooves in turn and insert them to the end when reassembling.
2 Remove the front panel.	 <p>(R16451)</p>	

2. Removal of Front Grille

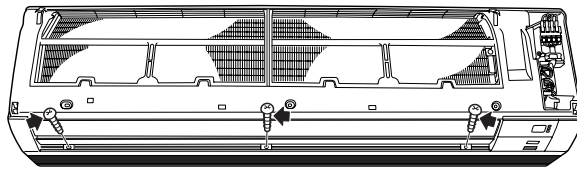
Procedure



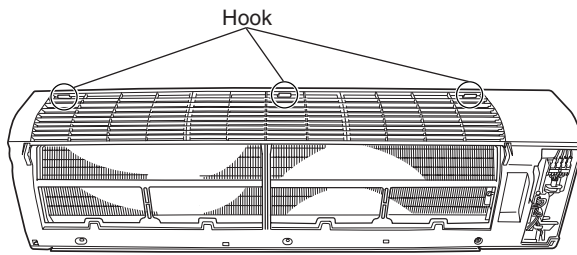
Warning Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
<p>1. Remove the service cover.</p> <p>1 Remove the screw and remove the service cover.</p>	 <p>Service cover (R16452)</p>  <p>(R16453)</p>	<ul style="list-style-type: none"> ■ You can remove the front grille without detaching the service cover.
<p>2. Remove the front grille.</p> <p>1 Remove the 3 screws of the front grille.</p> <p>2 Remove the screw caps with a flat screwdriver.</p>	 <p>Front grille (R16454)</p>  <p>(R16266)</p>	<ul style="list-style-type: none"> ■ Refer to the removal procedure in a reverse way when reassembling.

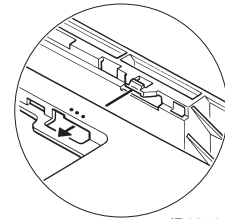
Step	Procedure	Points
3	Remove the lower 3 screws.	
4	Unfasten the 3 hooks on the top of the front grille.	<ul style="list-style-type: none"> ■ The convex marks (...) on the front panel indicate the position of the hooks.
5	Pull the upper part of the front grille out and lift the lower part up, and then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



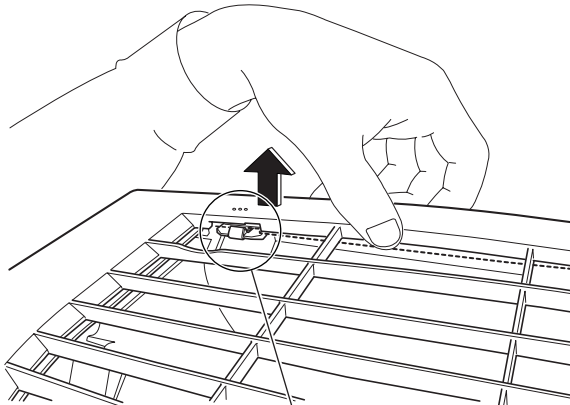
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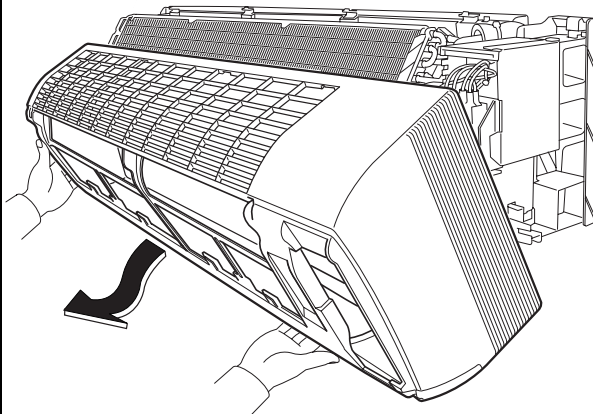
(R16511)



(R12715)



(R9487)



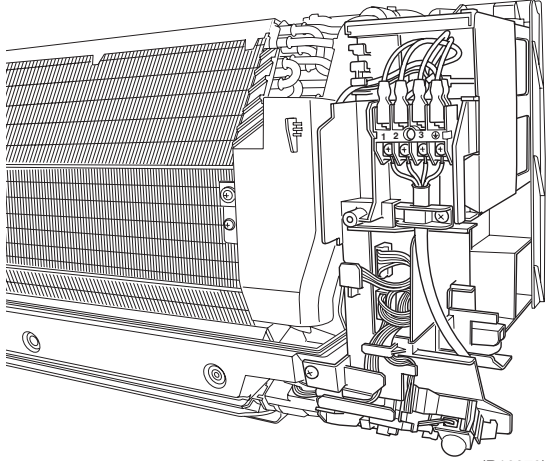
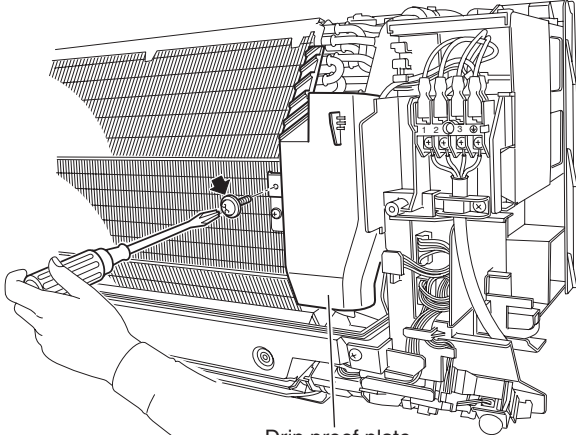
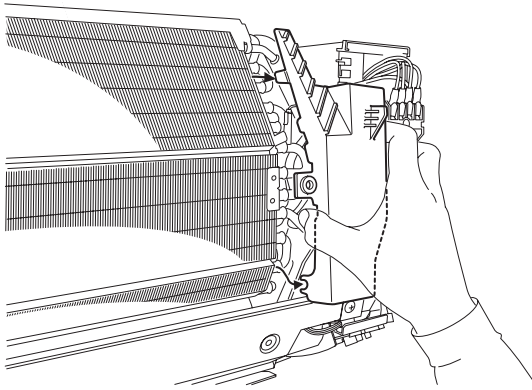
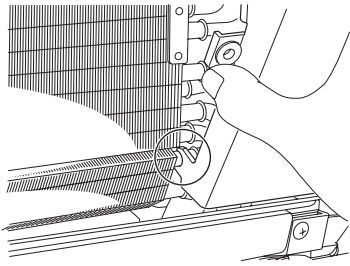
(R16269)

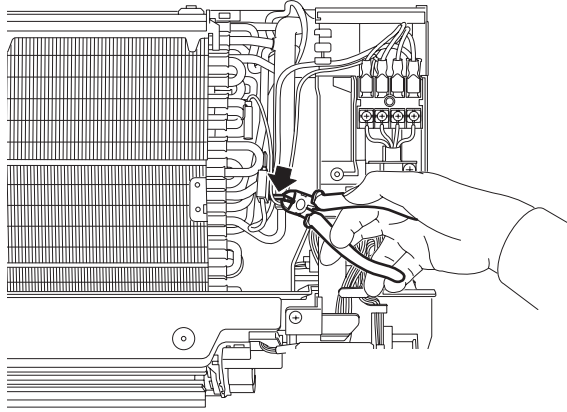
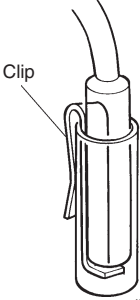
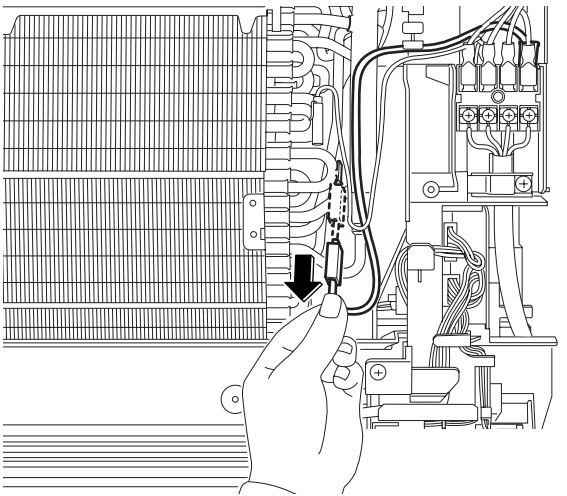
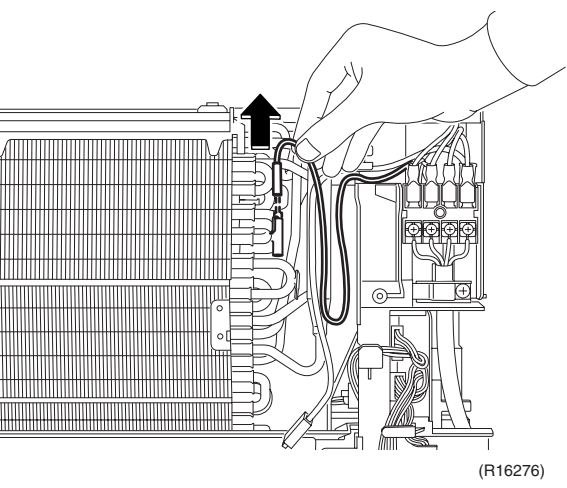
3. Removal of Electrical Box

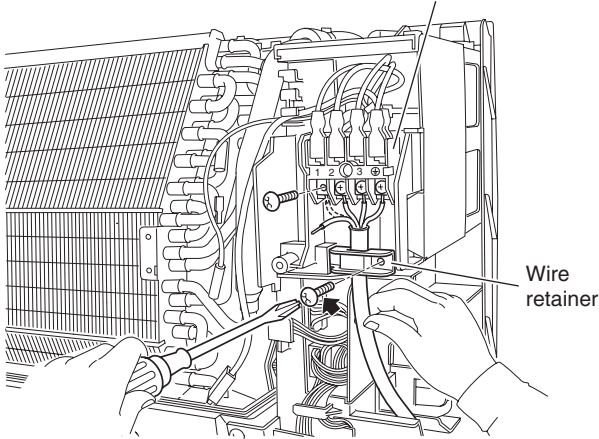
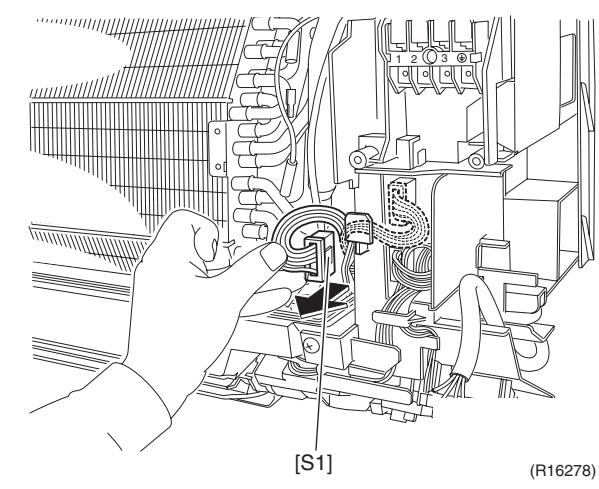
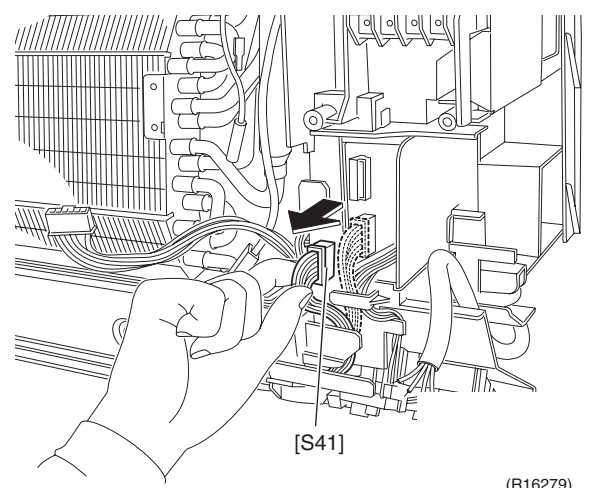
Procedure

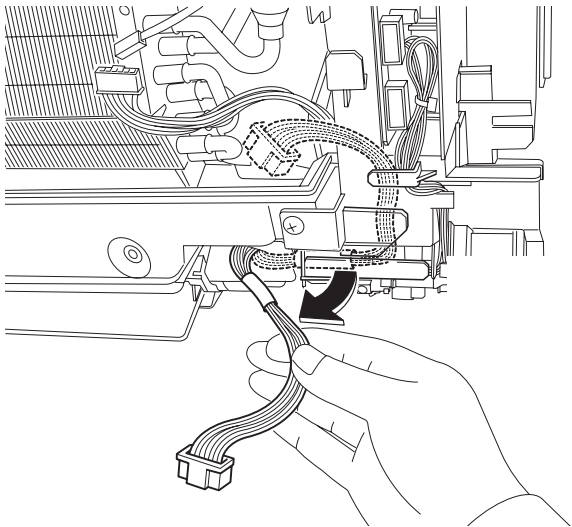
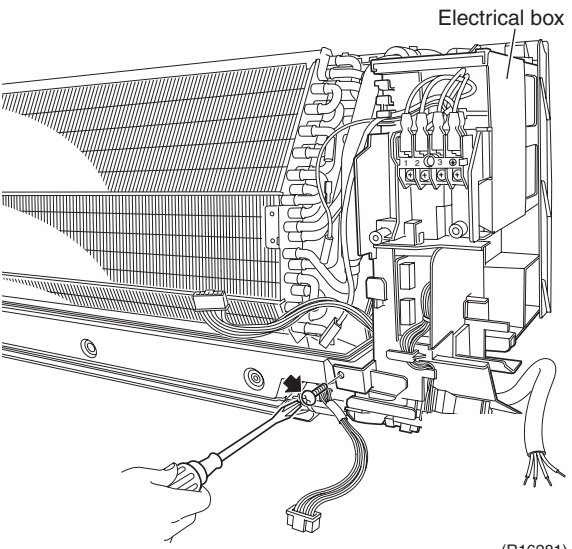
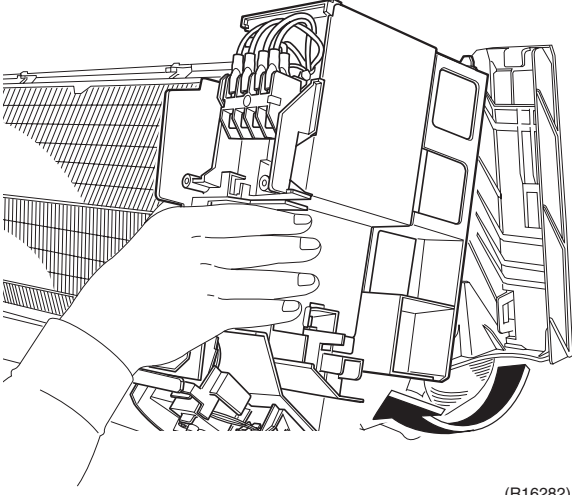
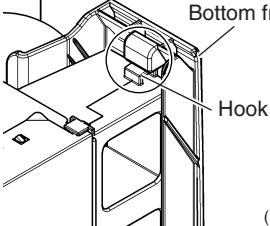


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Step	Procedure	Points
1. Layout of the parts	 <p style="text-align: right;">(R16270)</p>	<p>Preparation</p> <ul style="list-style-type: none"> Remove the front grille according to the "Removal of Front Grille."
2. Remove the drip proof plate.	 <p style="text-align: center;">Drip proof plate (R16271)</p>	
1 Remove the screw. 2 Remove the drip proof plate from the indoor heat exchanger.	 <p style="text-align: right;">(R16272)</p>	 <p style="text-align: right;">(R16273)</p> <ul style="list-style-type: none"> When reassembling, fit the hook to the indoor heat exchanger.

Step	Procedure	Points
<p>3. Release the earth wire and the indoor heat exchanger thermistor.</p>	 <p>(R16274)</p>	<p>■ Be careful not to lose the clip of the thermistor.</p>  <p>(R11268)</p>
<p>1 Cut the clamp.</p>	 <p>(R16275)</p>	
<p>2 Pull out and release the earth wire.</p>	 <p>(R16276)</p>	

Step	Procedure	Points
4. Remove the electrical box.	<p data-bbox="826 230 970 259">Terminal board</p>  <p data-bbox="1007 521 1082 568">Wire retainer</p>	
1 Remove the 4 screws and disconnect the connection wires on the terminal board. Remove the screw and remove the wire retainer.	(R16277)	
2 Disconnect the connector for the fan motor [S1] and release the harness from the hook.	 <p data-bbox="772 1196 815 1225">[S1]</p> <p data-bbox="1007 1205 1082 1234">(R16278)</p>	
3 Disconnect the connector for the swing motors [S41].	 <p data-bbox="772 1673 815 1702">[S41]</p> <p data-bbox="986 1718 1061 1747">(R16279)</p>	

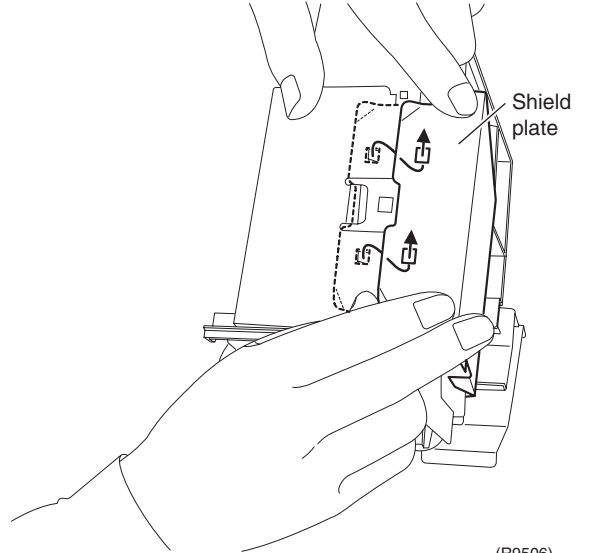
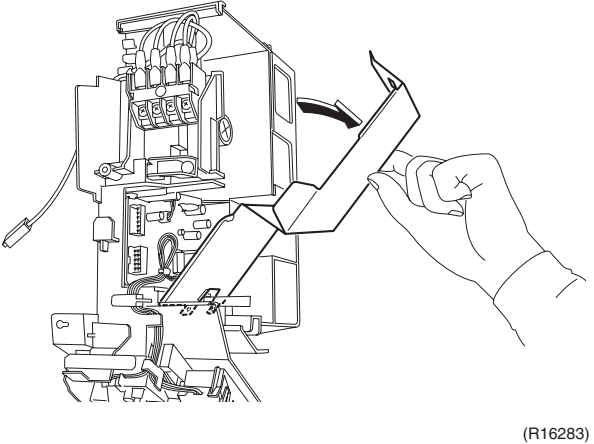

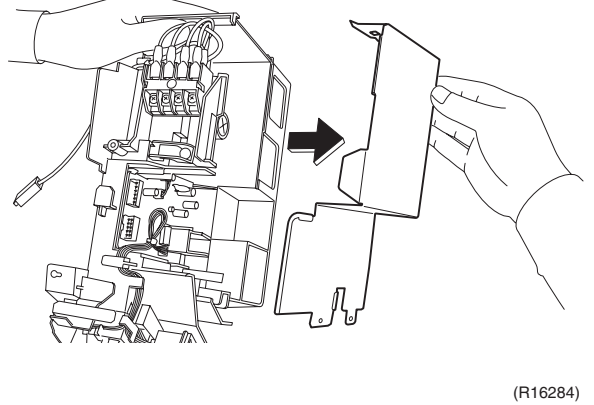
Step	Procedure	Points
4	Release the harness from the hooks.	
	 <p style="text-align: right;">(R16280)</p>	
5	Remove the screw of the electrical box.	
	 <p style="text-align: right;">(R16281)</p>	
6	Lift up the electrical box from the bottom frame and remove it.	
	 <p style="text-align: right;">(R16282)</p>	<p>■ Fit the back hook of the electrical box to the bottom frame when reassembling.</p>  <p style="text-align: right;">(R9647)</p>

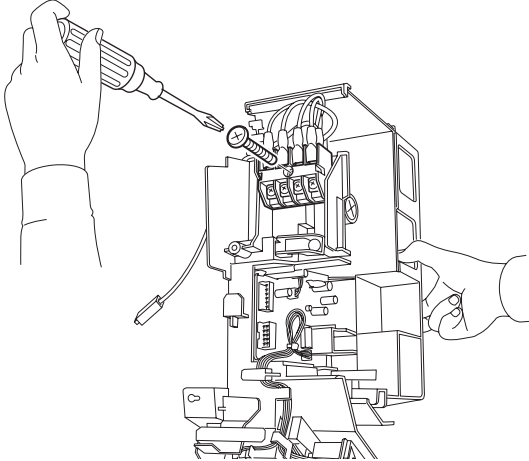
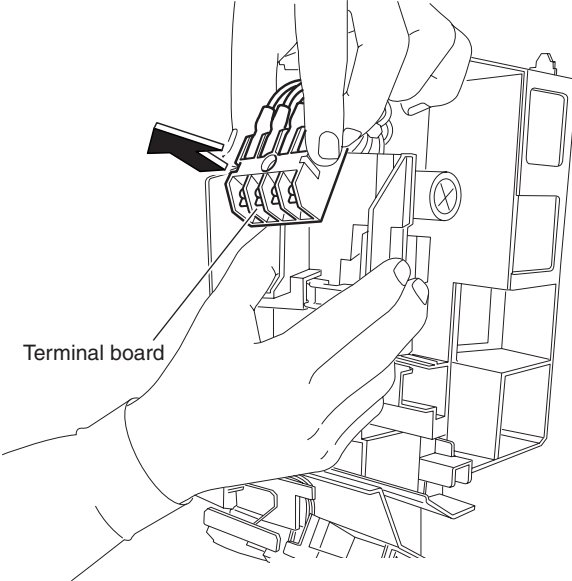
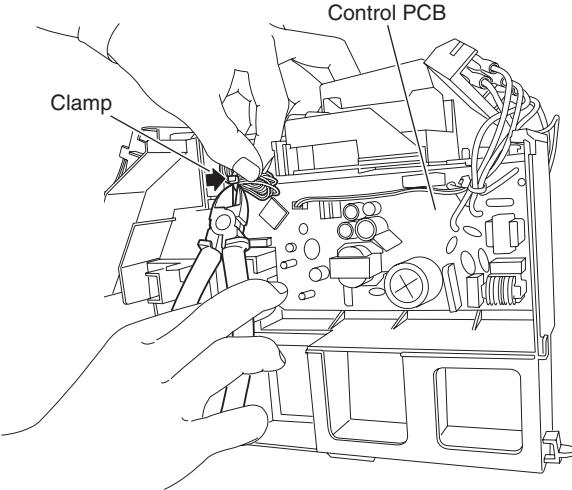
4. Removal of PCBs

Procedure

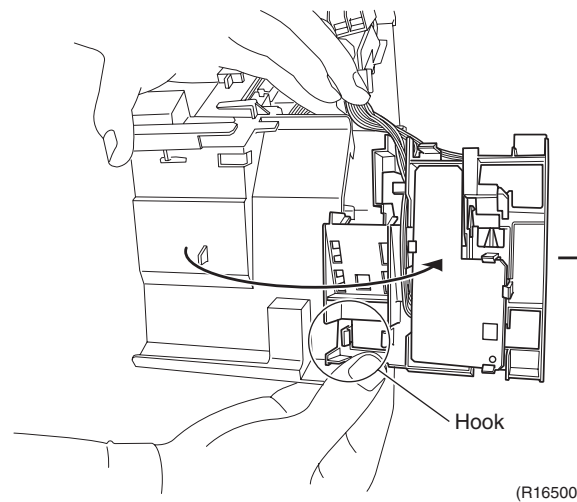
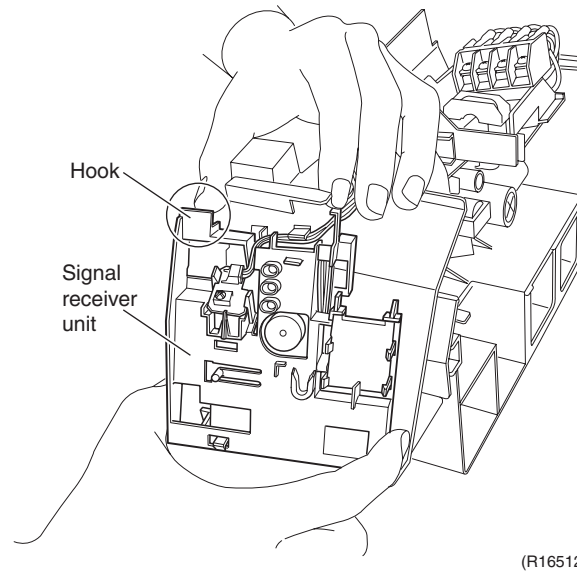
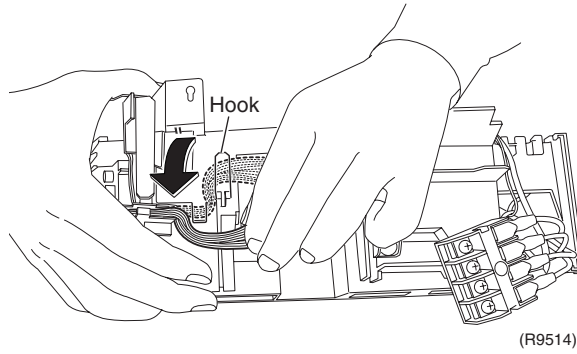


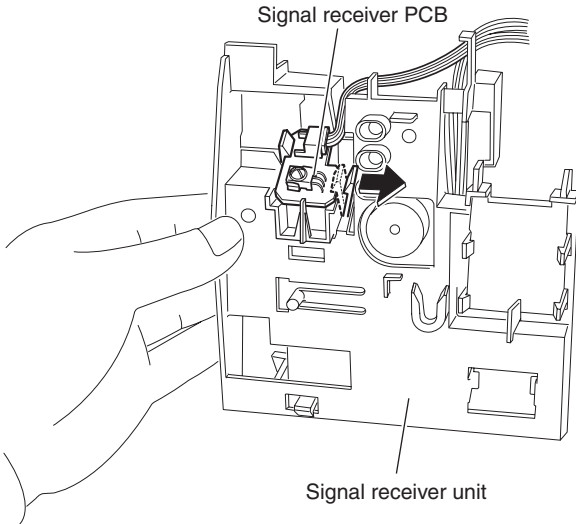
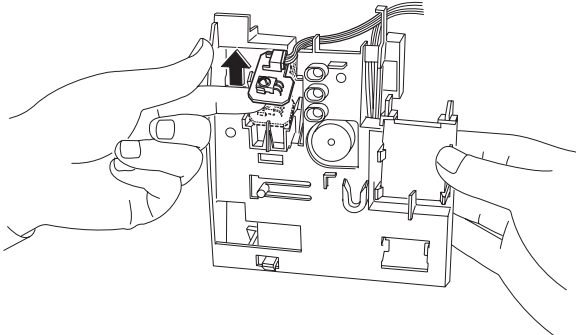
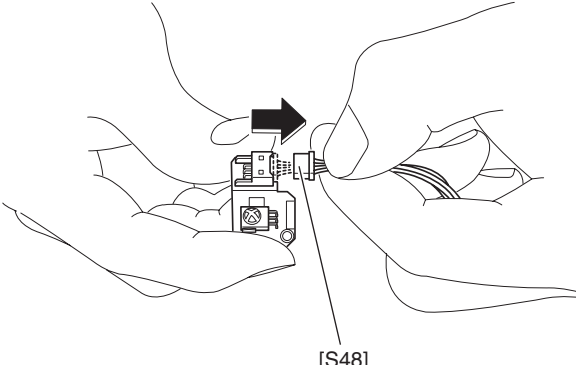
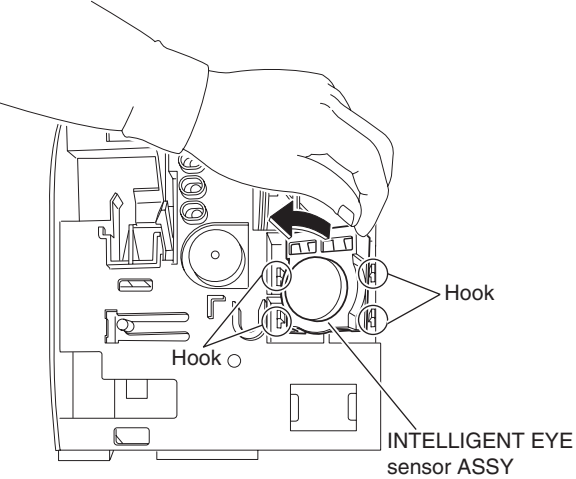
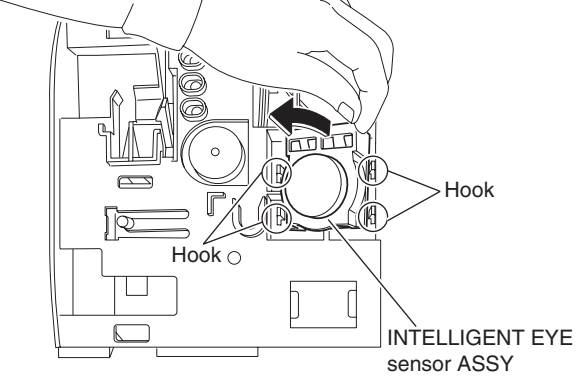
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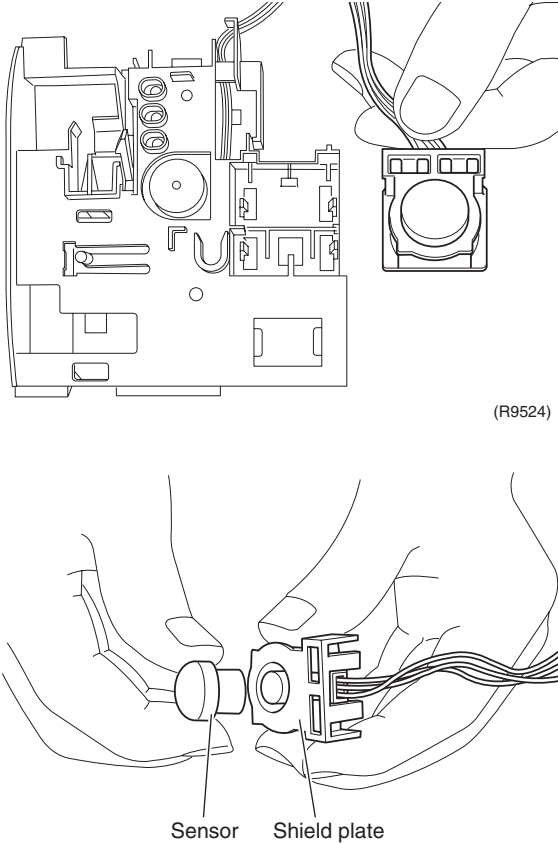
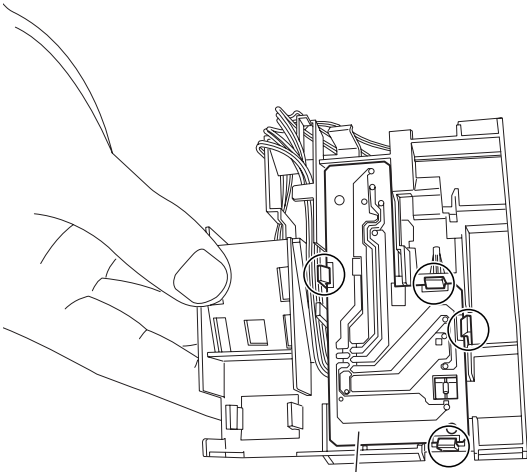
Step	Procedure	Points
1. Remove the signal receiver PCB.		<p>Preparation</p> <ul style="list-style-type: none"> Remove the electrical box according to the “Removal of Electrical Box.”
2. Open the shield plate.		<ul style="list-style-type: none"> The shield plate has 2 hooks at the lower part also. 
3. Remove the shield plate.		

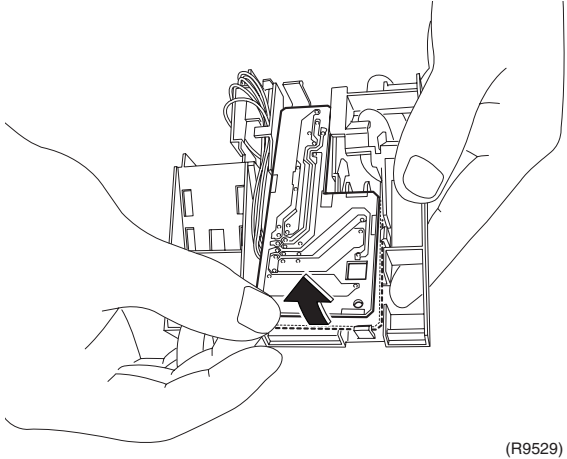
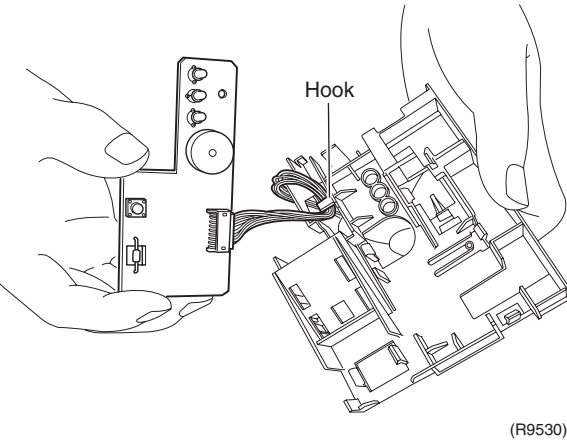
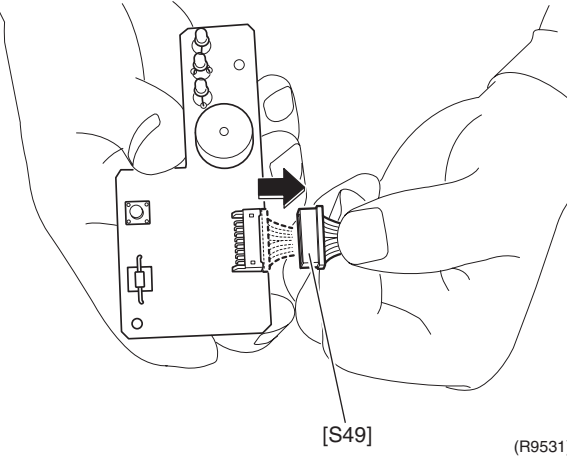
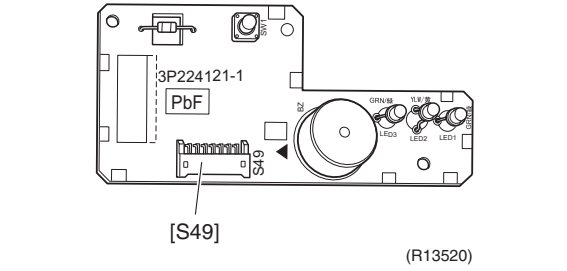
Step	Procedure	Points
4	Remove the screw of the terminal board.	
		
	(R16285)	
5	Remove the terminal board. (1 hook at the back)	
	 <p data-bbox="512 1115 655 1137">Terminal board</p>	
	(R16286)	
6	Cut the clamp.	
	 <p data-bbox="820 1429 938 1451">Control PCB</p> <p data-bbox="539 1518 603 1541">Clamp</p>	
	(R16499)	

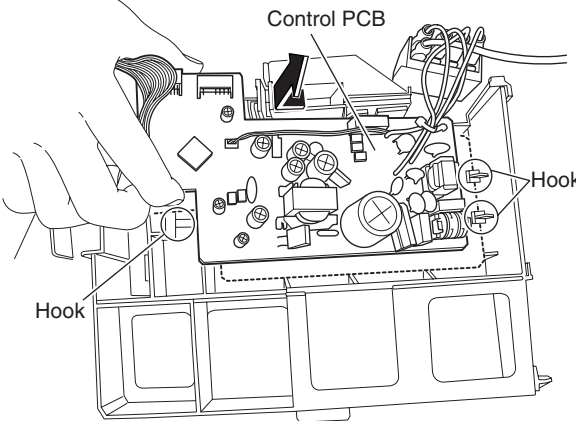
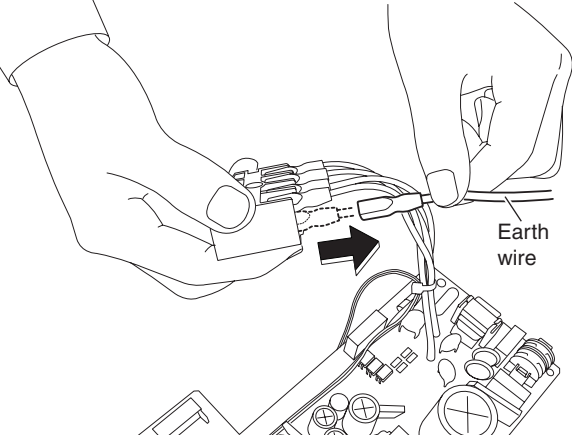
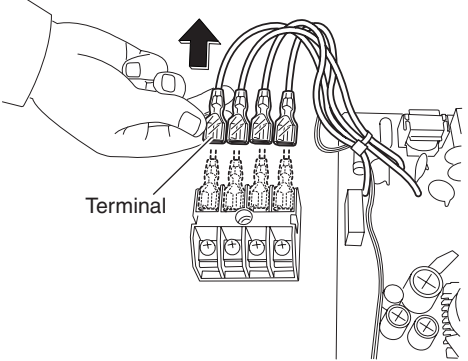
Step	Procedure	Points
7	Release the harness from the hook.	<ul style="list-style-type: none"> ■ When reassembling, make sure to hook the harness.
8	Push and unfasten the hook of the signal receiver unit.	
9	Open the signal receiver unit. Unfasten the hook and remove the signal receiver unit.	

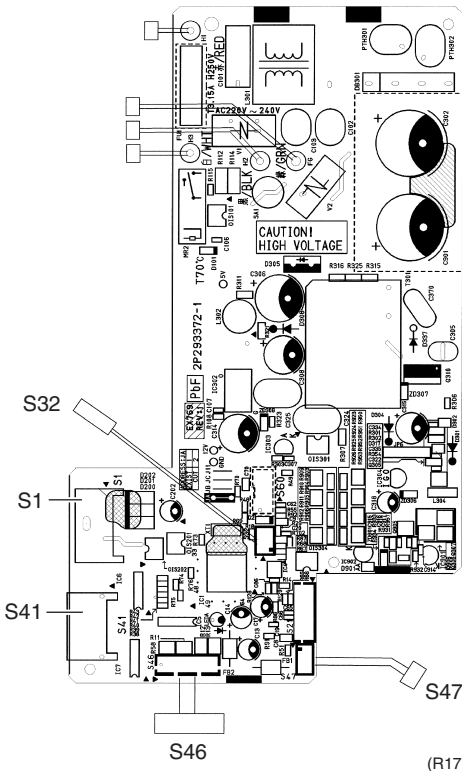
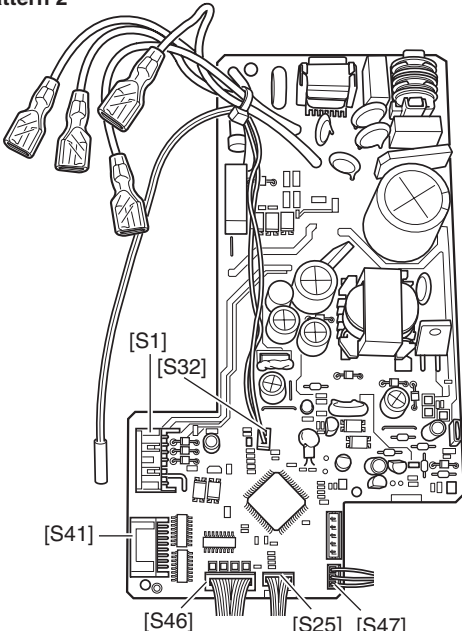


Step	Procedure	Points	
10	<p>Unfasten the hook on the right of the signal receiver PCB. (Then the signal receiver PCB is lifted up.)</p>	 <p>Signal receiver PCB</p> <p>Signal receiver unit</p>	
11	<p>Remove the signal receiver PCB.</p>	 <p>(R16513)</p>	
12	<p>Disconnect the connector. [S48] : to control PCB</p>	 <p>[S48]</p> <p>(R16514)</p> <p>(R9522)</p>	
2.	<p>Remove the INTELLIGENT EYE sensor PCB.</p>	 <p>Hook</p> <p>Hook</p> <p>INTELLIGENT EYE sensor ASSY</p> <p>(R9523)</p>	<p>■ Some models have no INTELLIGENT EYE sensor PCB.</p>
1	<p>Unfasten the 2 hooks on the right and then the 2 hooks on the left. Remove the INTELLIGENT EYE sensor ASSY.</p>	 <p>Hook</p> <p>Hook</p> <p>INTELLIGENT EYE sensor ASSY</p> <p>(R9523)</p>	

Step	Procedure	Points
2	Remove the sensor from the shield plate.	<ul style="list-style-type: none"> ■ When reassembling, set the sensor at the position where it “clicks”. Otherwise, the sensor is not completely set.
3. Remove the display PCB.	1 Unfasten the 4 hooks.	
	 <p data-bbox="995 640 1054 663">(R9524)</p> <p data-bbox="671 1055 887 1077">Sensor Shield plate</p> <p data-bbox="995 1088 1054 1111">(R9525)</p>	
	 <p data-bbox="823 1704 943 1727">Display PCB</p> <p data-bbox="991 1749 1046 1771">(R9528)</p>	

Step	Procedure	Points
2	Lift up the display PCB.	
	 <p>(R9529)</p>	
3	Release the harness from the hook.	
	 <p>(R9530)</p>	
4	Disconnect the connector. [S49]: to control PCB	
	 <p>(R9531)</p>	
	 <p>(R13520)</p>	

Step	Procedure	Points
4. Remove the control PCB.	<p data-bbox="150 248 456 344">1 Unfasten the 3 hooks. Lift up and remove the control PCB.</p>  <p data-bbox="995 696 1054 719">(R9517)</p> <p data-bbox="150 752 469 813">2 Pull out the earth wire from the terminal board.</p>  <p data-bbox="995 1227 1054 1249">(R17243)</p> <p data-bbox="150 1339 469 1400">3 Pull out the terminals from the terminal board.</p>  <p data-bbox="970 1742 1029 1765">(R9519)</p>	

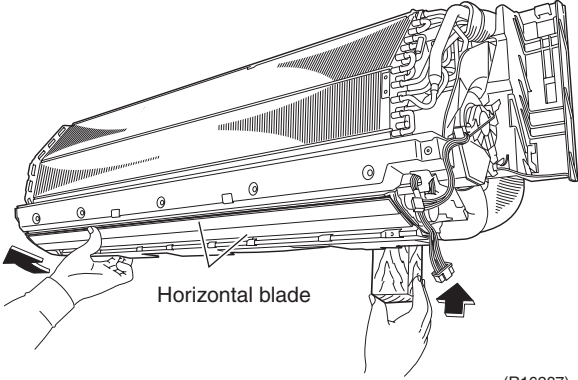
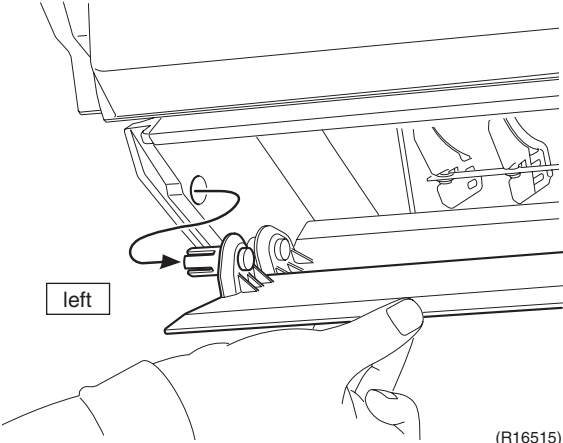
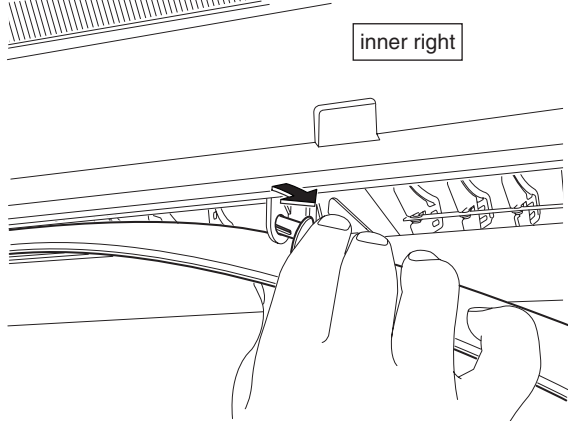
Step	Procedure	Points
	<p>Pattern 1</p>  <p style="text-align: right;">(R17655)</p> <p>Pattern 2</p>  <p style="text-align: right;">(R17124)</p>	<p>[S1] : DC fan motor [S25] : INTELLIGENT EYE sensor PCB [S32] : indoor heat exchanger thermistor [S41] : swing motors [S46] : display PCB [S47] : signal receiver PCB</p> <ul style="list-style-type: none"> ■ Some models have no INTELLIGENT EYE sensor PCB.

5. Removal of Horizontal Blades / Swing Motors

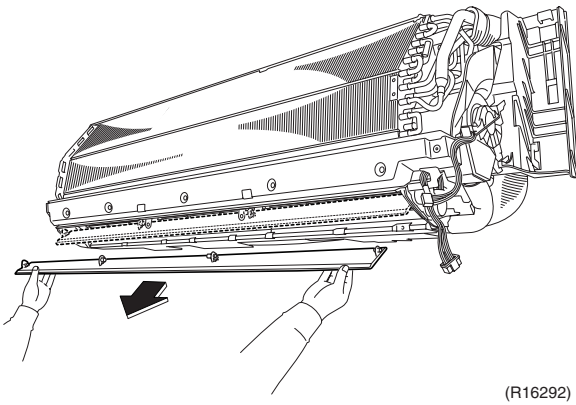
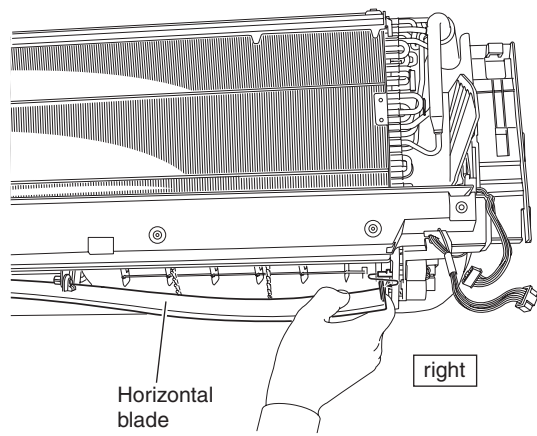
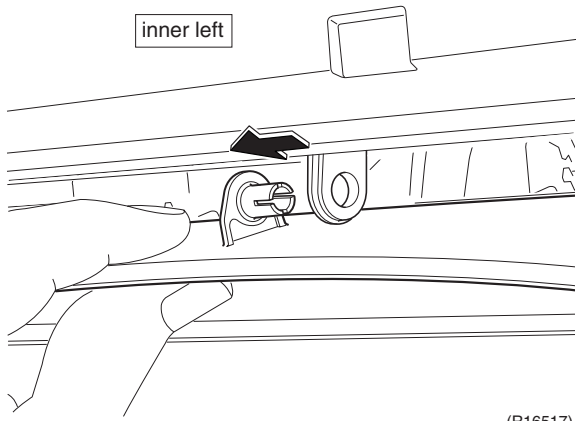
Procedure

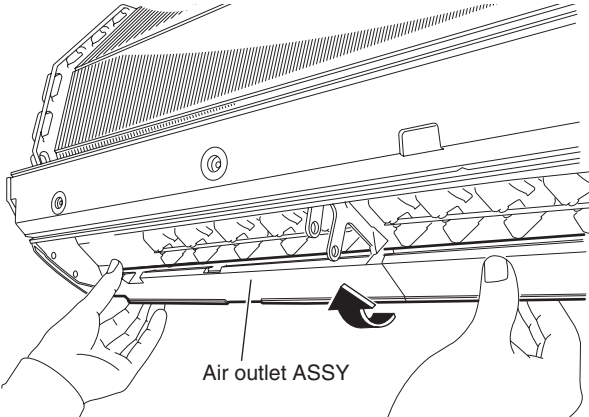
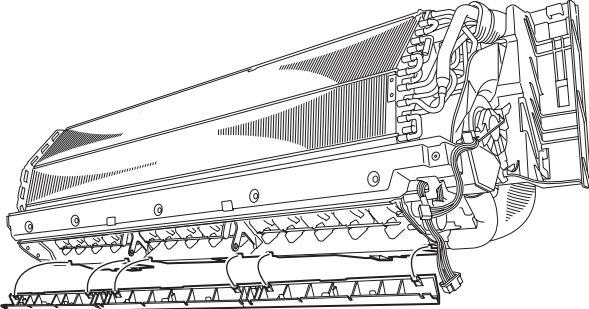
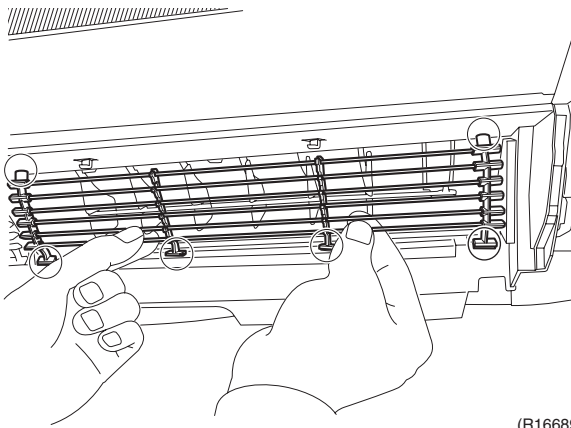
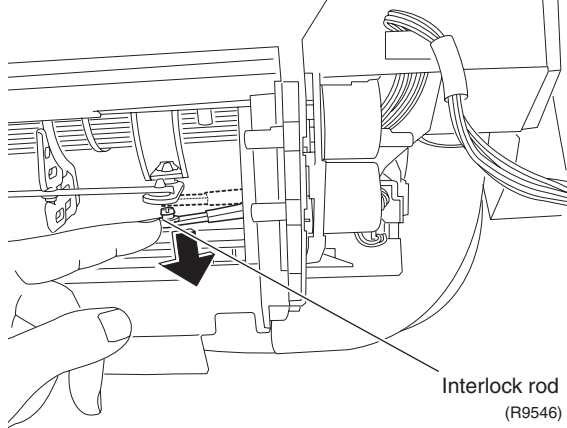


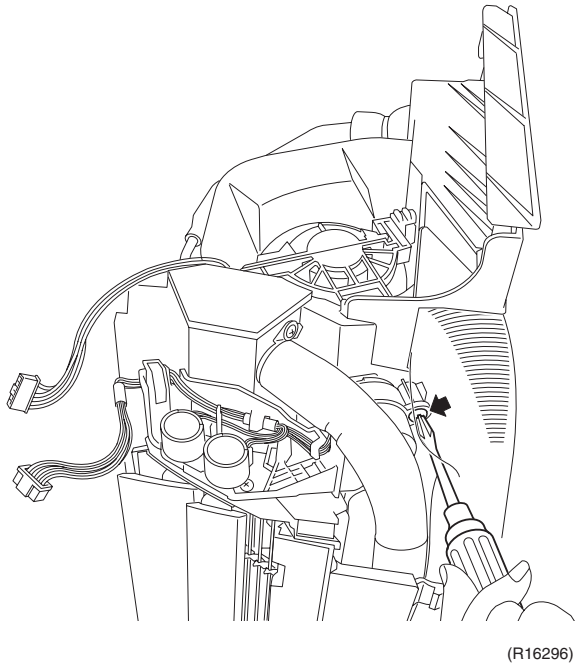
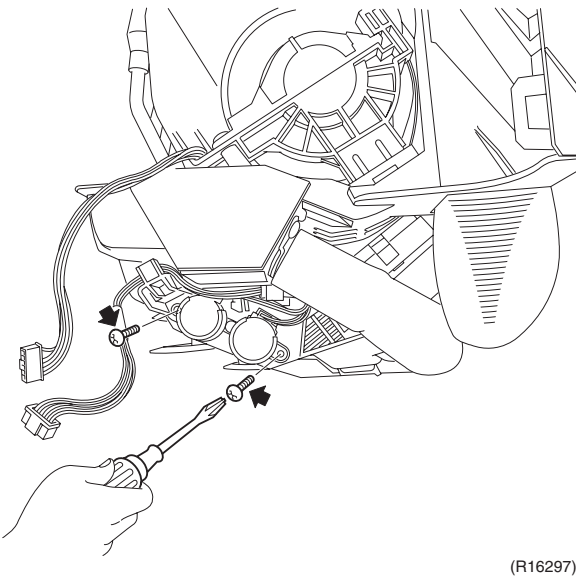
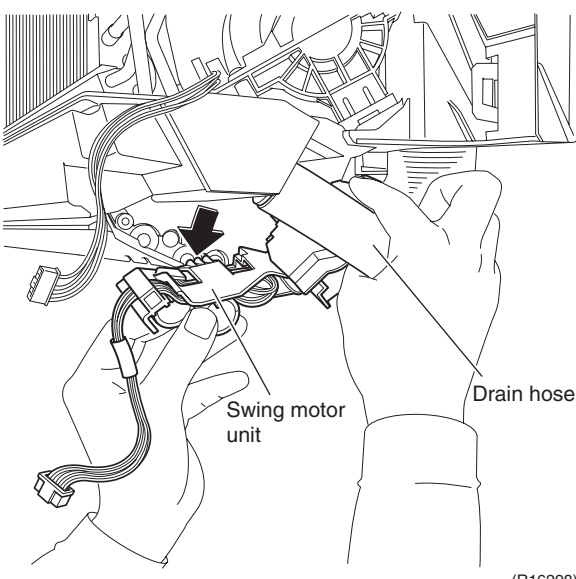
Warning Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

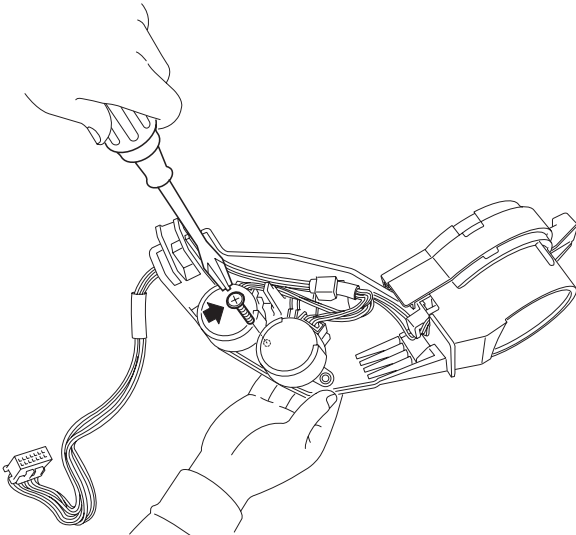
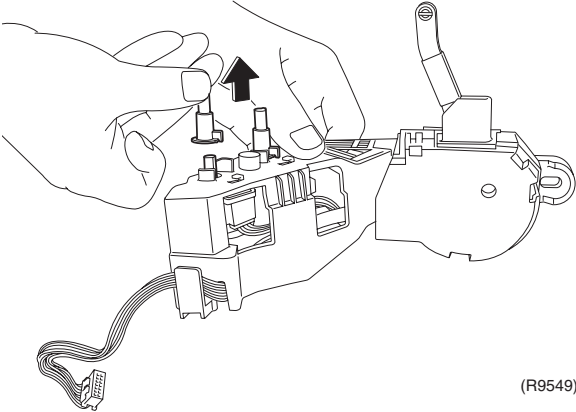
Step	Procedure	Points
1. Remove the horizontal blades.	 <p style="text-align: right;">(R16287)</p>  <p style="text-align: right;">(R16515)</p>  <p style="text-align: right;">(R16516)</p>	

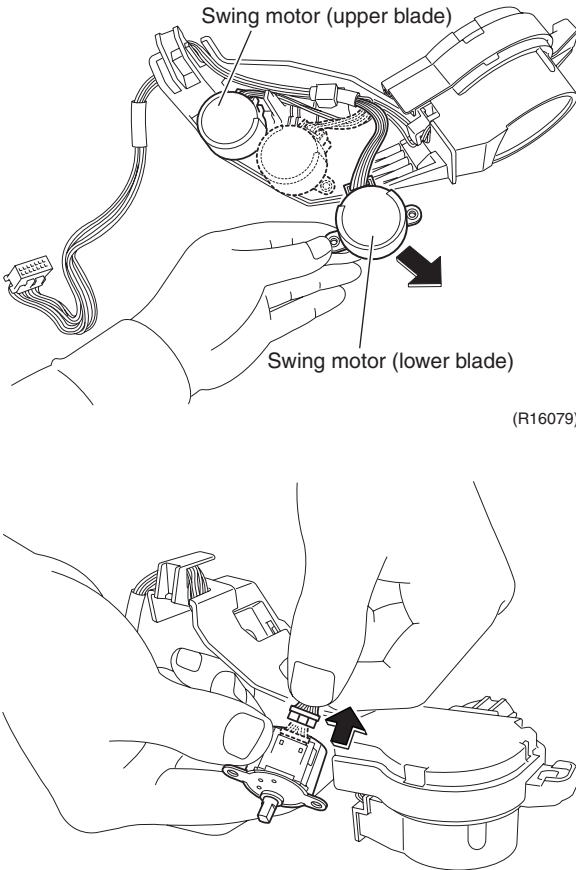
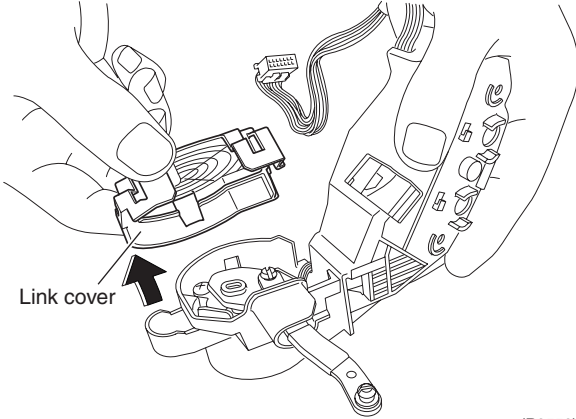
Step	Procedure	Points
2	Release the shafts in turn.	
3	Remove the horizontal blade.	<ul style="list-style-type: none"> Remove both the horizontal blades (upper and lower) in the same way.

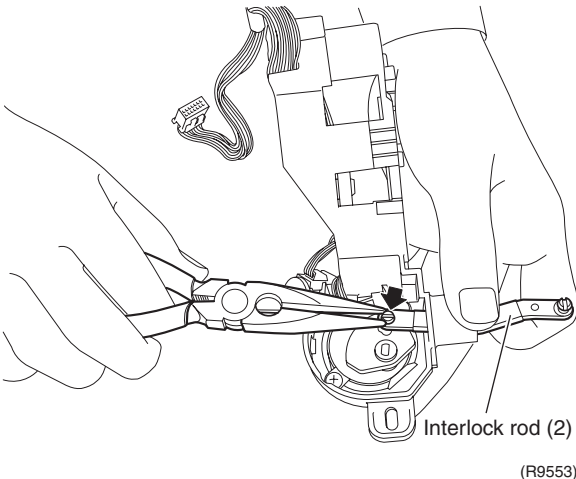
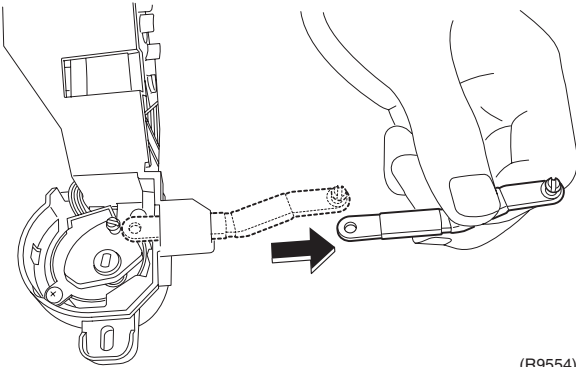
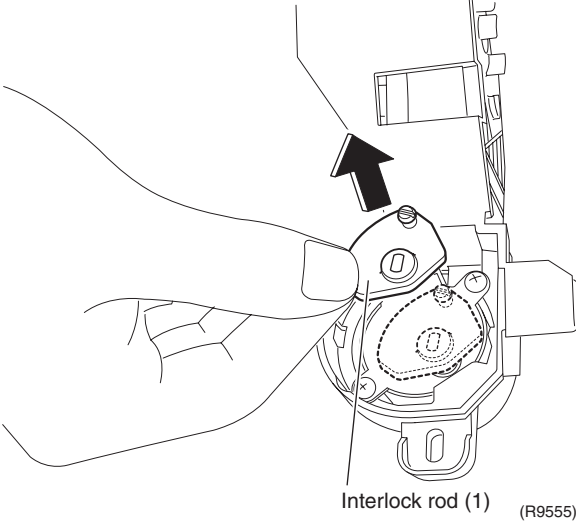


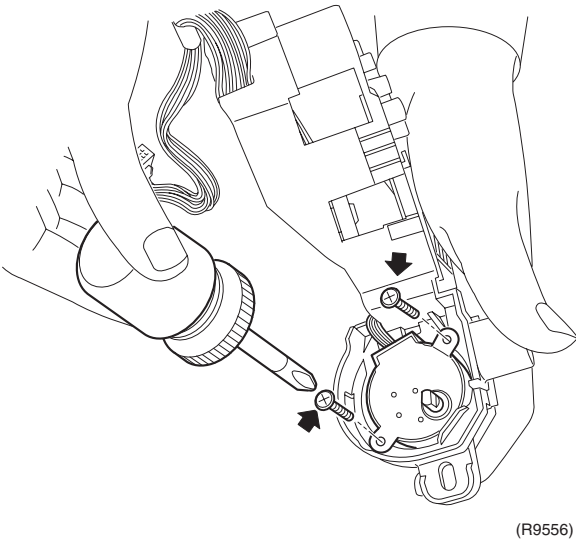
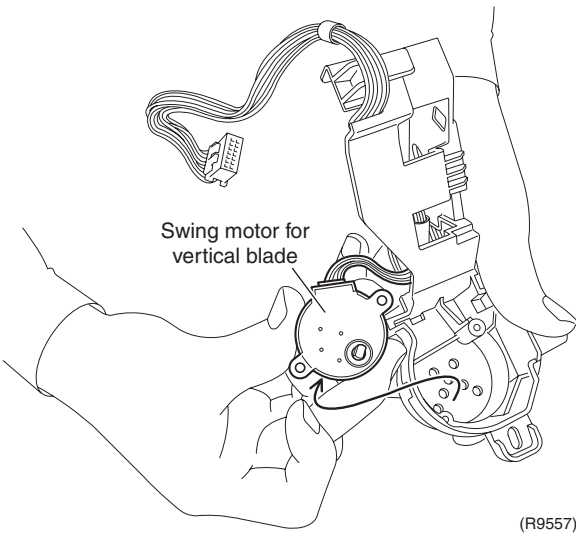
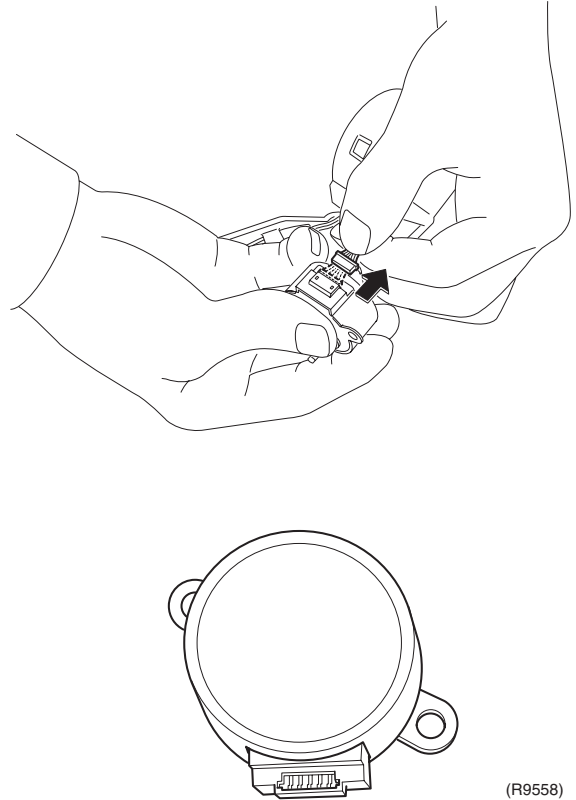
Step	Procedure	Points
<p>2. Remove the air outlet ASSYs.</p>	<p>1 Remove the air outlet ASSYs by pushing the 2 hooks at the back of each.</p>  <p>(R16519)</p>  <p>(R16520)</p>	<ul style="list-style-type: none"> ■ The 3 air outlet ASSYs are bound with sealing materials.
<p>3. Remove the fan guards.</p>	<p>1 Unfasten the 4 lower hooks and the 2 upper hooks and remove the fan guard.</p>  <p>(R16689)</p>	<ul style="list-style-type: none"> ■ Remove the other 2 fan guards likewise. ■ Some models have no fan guard.
<p>4. Remove the swing motors for horizontal blades.</p>	<p>1 Release the interlock rod.</p>  <p>Interlock rod (R9546)</p>	

Step	Procedure	Points
2	Remove the screw at the rear of the indoor unit.	
		
3	Remove the 2 screws (front and rear).	
		
4	Pull out the drain hose, then remove the swing motor unit.	
		

Step	Procedure	Points
5	Remove the screw at the center.	
	 <p>(R9548)</p>	
6	Remove the 2 pivots.	
	 <p>(R9549)</p>	

Step	Procedure	Points
<p>7 Remove the swing motors.</p> <p>8 Disconnect the connector to remove the swing motor.</p>	 <p>(R16079)</p> <p>(R9551)</p>	<p>Caution</p> <p>When reassembling, do not confuse the installing order of the 2 motors and the colors of the connectors.</p> <p>If you set the connectors or motors opposite, the horizontal blades do not move smoothly or noise may be heard.</p> <ol style="list-style-type: none"> (1) Set the swing motor of the upper blade first. (connector: white) (2) Then, set the swing motor of the lower blade. (connector: red) (3) Fix both swing motors with a screw.
<p>5. Remove the swing motor for vertical blades.</p>	<p>1 Remove the link cover.</p>  <p>(R9552)</p>	<p>■ Some models have no swing motor for vertical blade.</p>

Step	Procedure	Points
2	Remove the interlock rod (2) with pliers.	
	 <p>Interlock rod (2) (R9553)</p>	
	 <p>(R9554)</p>	
3	Remove the interlock rod (1).	
	 <p>Interlock rod (1) (R9555)</p>	

Step	Procedure	Points
4	Remove the 2 screws.	
	 <p>(R9556)</p>	
5	Remove the swing motor for the vertical blade.	
	 <p>Swing motor for vertical blade</p> <p>(R9557)</p>	
6	Disconnect the connector.	
	 <p>(R9558)</p>	

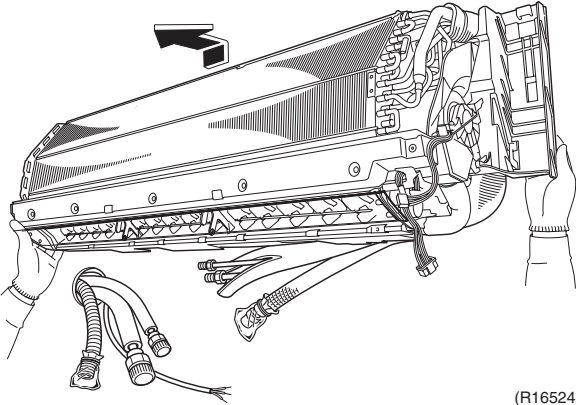
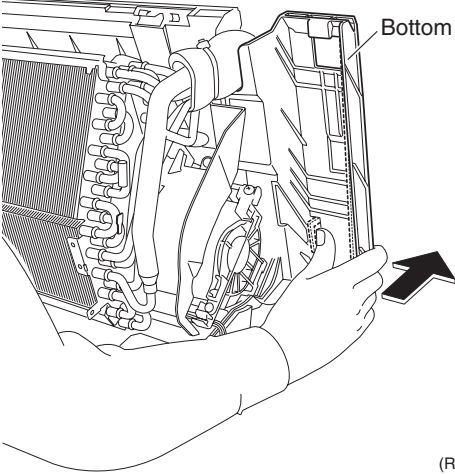
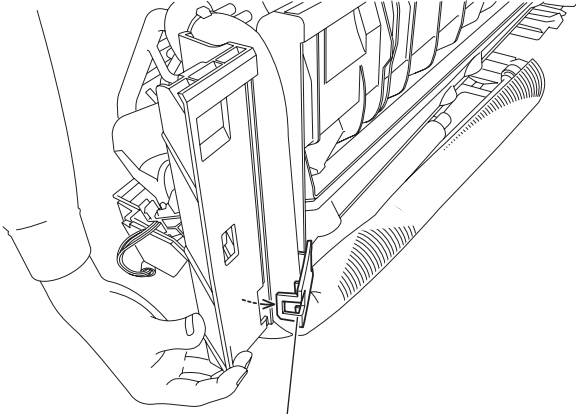
6. Removal of Indoor Heat Exchanger

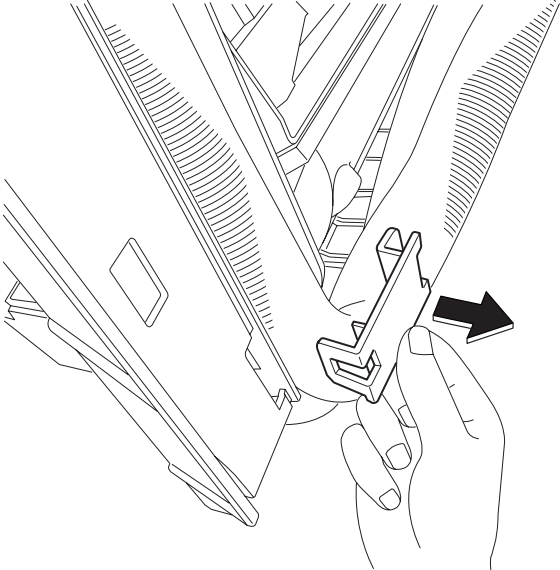
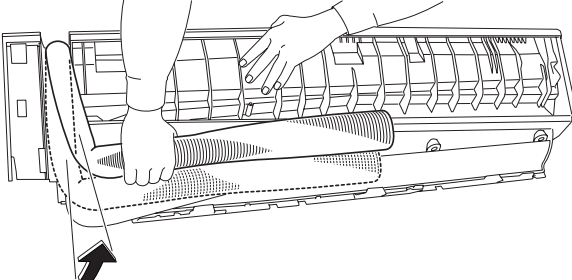
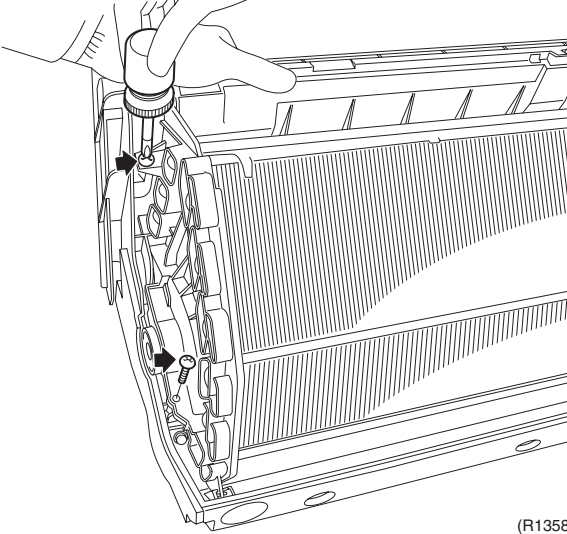
Procedure

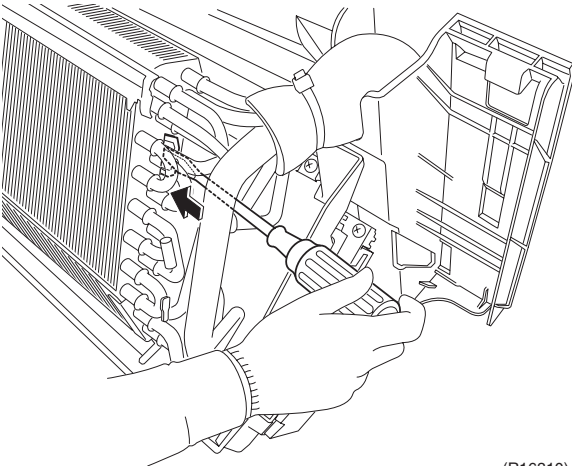
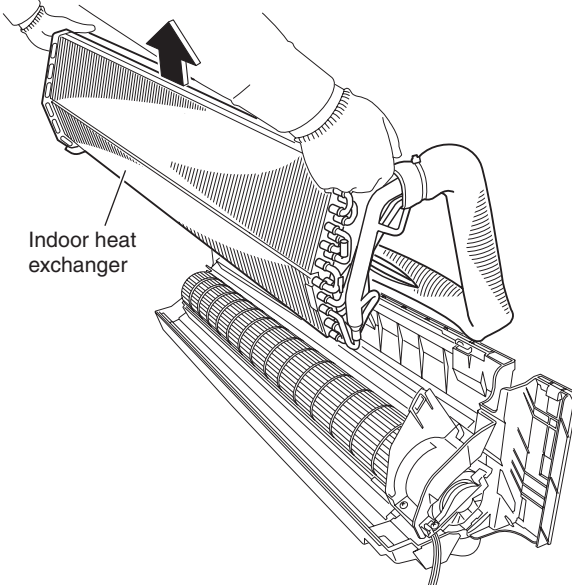


Warning Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1. Disconnect the refrigerant piping.	<p>(R16521)</p>	<p>Preparation</p> <ul style="list-style-type: none"> Remove the electrical box according to the "Removal of Electrical Box". <p>Caution If the refrigerant leaks, repair the leakage, then collect all refrigerant from the unit. After conducting vacuum drying, recharge a proper amount of refrigerant.</p>
1 Hold the indoor unit up with a piece of wood etc.	<p>Drain hose</p> <p>(R16522)</p>	<p>Caution From the viewpoint of global environment protection, be sure to use a vacuum pump for air purging.</p>
2 Pull out the drain hose.	<p>Gas piping</p> <p>Liquid piping</p> <p>(R16523)</p>	<p>Caution In pump-down work, be sure to stop the compressor before disconnecting the refrigerant piping. If the refrigerant piping is disconnected with the compressor operating and the stop valve open, air may be sucked in to generate an over-pressure in refrigeration cycle, thus resulting in pipe rupture or accidental injury.</p> <ul style="list-style-type: none"> Place a plastic sheet under the drain pan to prevent from wetting the floor with the remaining drain water. If the drain hose is embedded in the wall, disconnect the drain hose beforehand. Carry out the removal work with 2 wrenches. When the pipings are disconnected, protect both the openings of pipe and unit from entering moisture.
3 Unscrew the flare nuts for gas piping and liquid piping.		

Step	Procedure	Points
2. Remove the piping fixture.	<p data-bbox="150 248 454 344">1 Detach the indoor unit from the installation plate.</p>  <p data-bbox="1007 674 1075 696">(R16524)</p>	
2. Push the bottom frame.	<p data-bbox="150 719 464 748">2 Push the bottom frame.</p>  <p data-bbox="906 779 1038 801">Bottom frame</p> <p data-bbox="959 1218 1027 1240">(R16309)</p>	
3. Release the piping fixture.	<p data-bbox="150 1263 411 1323">3 Release the piping fixture.</p>  <p data-bbox="724 1711 847 1733">Piping fixture</p> <p data-bbox="995 1740 1064 1762">(R9573)</p>	

Step	Procedure	Points	
4	Remove the piping fixture.	 <p>(R9574)</p>	
3. Remove the indoor heat exchanger.			
1	Slightly widen the auxiliary piping.	 <p>(R9575)</p>	
2	Remove the 2 screws on the left side.	 <p>(R13580)</p>	<p>⚠ Caution When removing or reassembling the indoor heat exchanger, be sure to wear gloves or wrap the indoor heat exchanger with cloths. (You may be injured by the fins.)</p>

Step	Procedure	Points
3	Push the hook on the right side and unfasten it.	
	 <p style="text-align: right;">(R16310)</p>	
4	Lift up and remove the indoor heat exchanger.	
	 <p style="text-align: right;">(R16311)</p>	<ul style="list-style-type: none"> ■ Press the right side of the indoor heat exchanger, and lift it up from the left side. <p>⚠ Caution When removing or reassembling the indoor heat exchanger, be sure to wear gloves or wrap the indoor heat exchanger with cloths. (You may be injured by the fins.)</p>

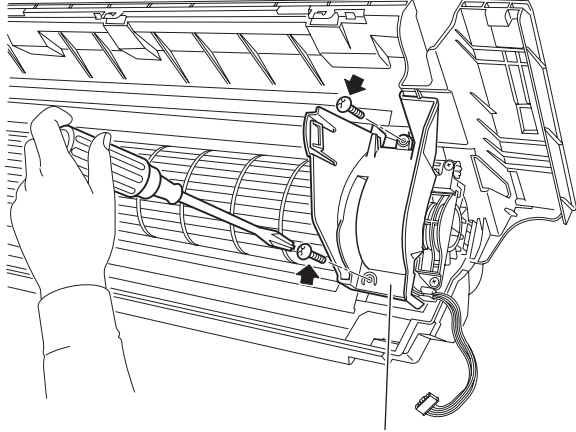
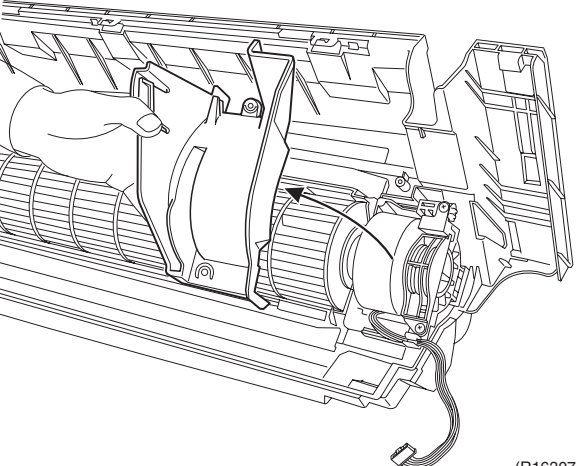
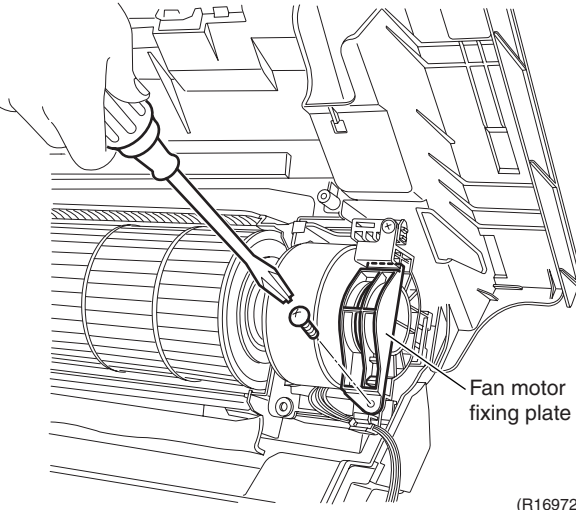
7. Removal of Fan Motor / Fan Rotor

Procedure

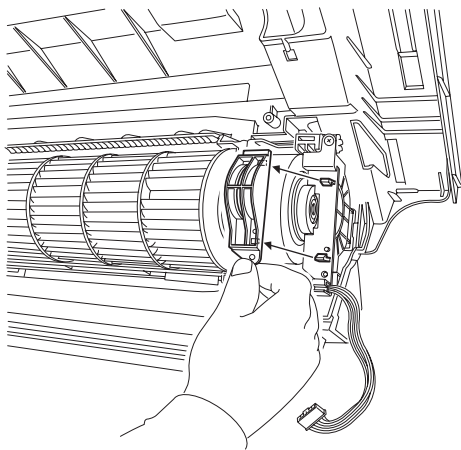


Warning

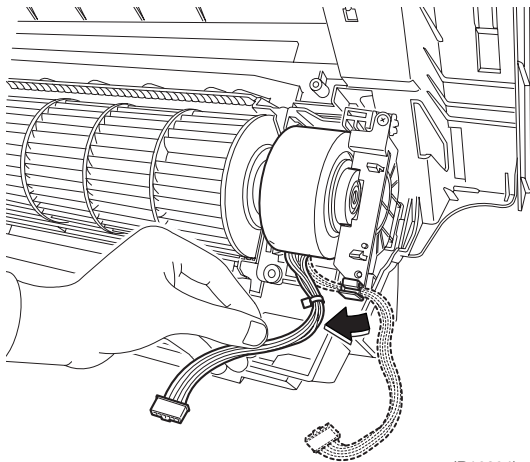
Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1. Remove the right side plate.	 <p data-bbox="810 898 959 925">Right side plate</p> <p data-bbox="995 920 1062 947">(R16306)</p>	
1 Remove the 2 screws.	 <p data-bbox="995 1424 1062 1451">(R16307)</p>	
2. Remove the fan rotor.	 <p data-bbox="959 1883 1062 1928">Fan motor fixing plate</p> <p data-bbox="995 2000 1062 2027">(R16972)</p>	
1 Remove the screw of the fan motor fixing plate and remove it.		

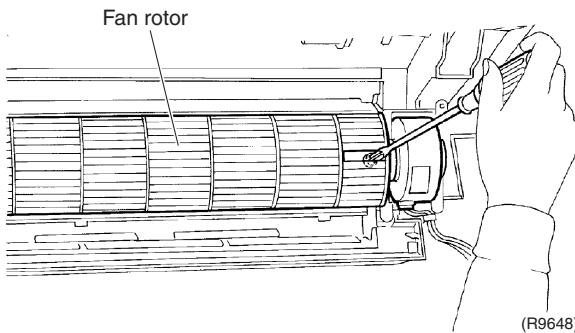
Step	Procedure	Points
2	Release the fan motor harness from the hook.	
3	Loosen the screw of the fan rotor.	



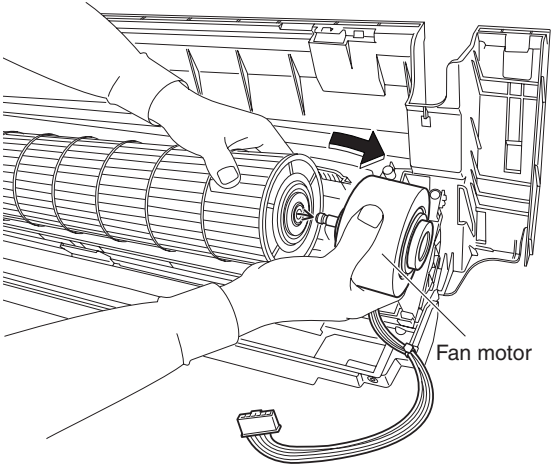
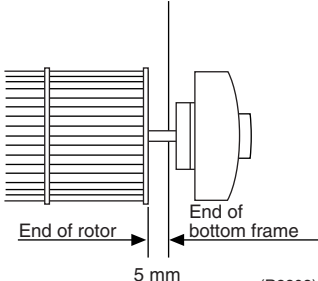
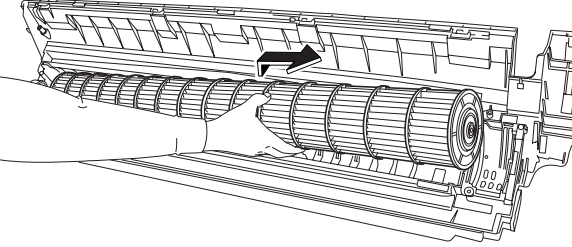
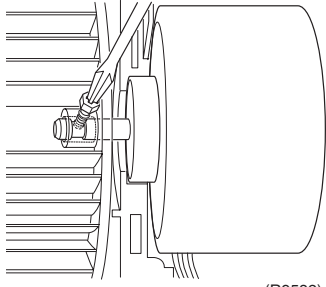
(R16973)



(R16304)



(R9648)

Step		Procedure	Points
4	Remove the fan motor.	 <p>(R16305)</p>	<p>■ When reassembling the fan motor and the fan rotor, provide as much as 5 mm of play between the side face of the rotor and the bottom frame.</p>  <p>(R2808)</p>
5	Remove the fan rotor.	 <p>(R9584)</p>	 <p>(R9582)</p> <ol style="list-style-type: none"> (1) Insert the fan motor leaving approx. 5 mm space. (2) Tighten the screw until it stops. Then turn the screw in one scroll. (3) Move the fan rotor and confirm the fan motor and the fan rotor are installed appropriately. (4) If appropriate, tighten the screw completely. (5) If not appropriate, go back to (1).

8. Removal of Vertical blade ASSY

Procedure



Warning

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

Step	Procedure	Points
<p>Unfasten the 2 hooks of each vertical blade ASSY. Remove the 3 vertical blade ASSYs.</p>		<ul style="list-style-type: none"> ■ When reassembling, connect the 3 vertical blade ASSYs. Fasten the hooks at the connecting points.
		<p>(R16504)</p> <ul style="list-style-type: none"> ■ Each vertical blade ASSY is united with a drain pan ASSY.

Revision History

Month / Year	Version	Revised contents
08/2012	Si041144	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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