



Si041352EB

REMOVAL PROCEDURE



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

6.0/7.0/7.1/8.0/8.5/9.0/9.5 kW Class 28000/33000 Btu/h Class



Indoor Unit



Inverter / Non-Inverter



Wall Mounted Type



Service Manual

Removal Procedure

Indoor Unit

●Cooling Only

FTKM33NV2S

FTKM28PVMK

FTKS71HVM
FTKS85HVM

FTKS28JV2S
FTKS33JV2S

FTKS71JVMG
FTKS85JVMG
FTKS71JVMG9
FTKS85JVMG9

FTKS60MVLT
FTKS70MVLT
FTKS80MVLT
FTKS90MVLT

FTM71JV14

FTM28NV28

●Heat Pump

FTXM71NVLT
FTXM80NVLT
FTXM90NVLT

FTXM28PVMK

FTXM85PVMA
FTXM95PVMA

FTXS60MVLT
FTXS70MVLT
FTXS80MVLT
FTXS90MVLT

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

1. Air Filters / Front Panel

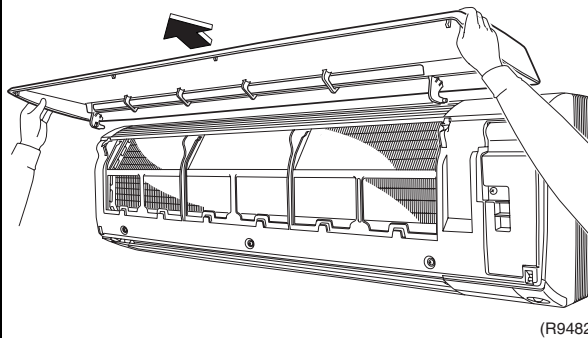
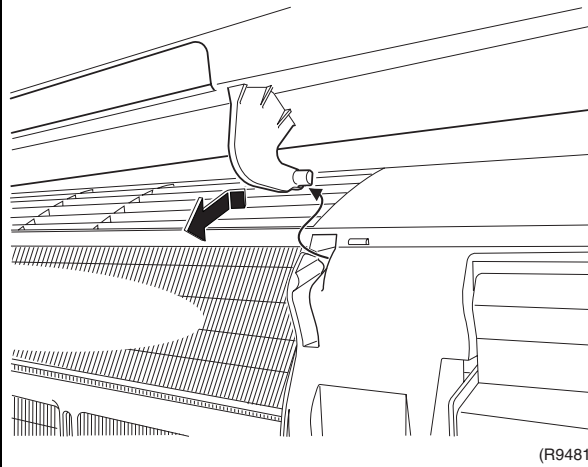
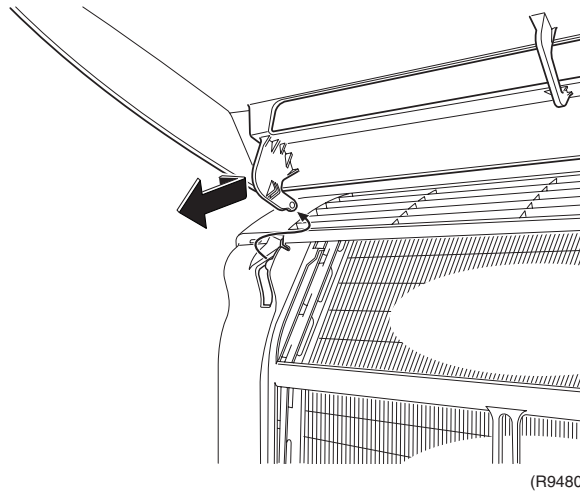
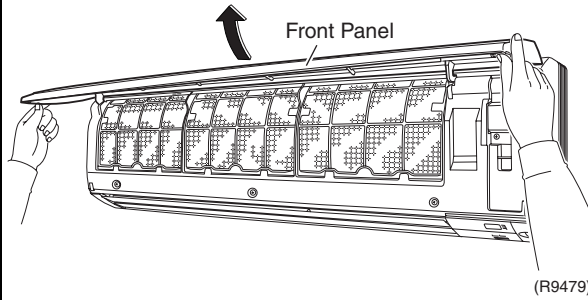


Warning

◆ 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 to the position where it stops.</p> <p>2 Pull out the air filter downward and remove it.</p>		<ul style="list-style-type: none"> ■ The 3 filters are interchangeable. ■ Insert the air filter with the "FRONT" mark faced up. ■ The air filter can be set easily by inserting it along the guides. ■ Be sure to insert the hooks (at 2 lower positions) when reassembling the air filter.
<p>2. Remove the Titanium apatite photocatalytic air-purifying filters.</p> <p>1 Remove the Titanium apatite photocatalytic air-purifying filter ASSY from the back of the air filter.</p> <p>2 Remove the Titanium apatite photocatalytic air-purifying filter from the frame.</p>		<ul style="list-style-type: none"> ■ The 3 filters are interchangeable.

Step	Procedure	Points
3. Remove the front panel.		
1	Open the front panel over the position where it stops.	
2	Slide the left rotary shaft to the right and release it.	
3	Remove the right rotary shaft in the same way.	<ul style="list-style-type: none"> When reassembling the front panel, fit the right and left rotary shafts one by one into the grooves and fully push them into position.
4	Remove the front panel.	

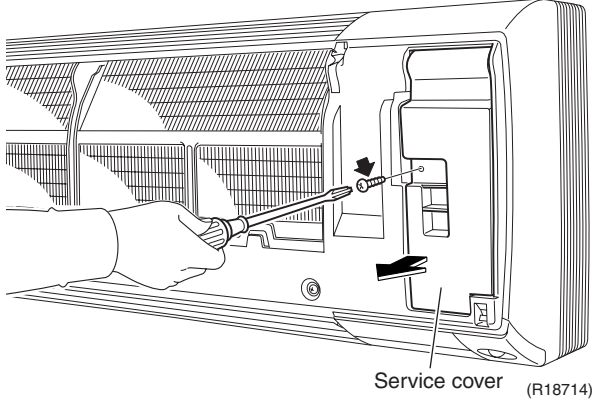
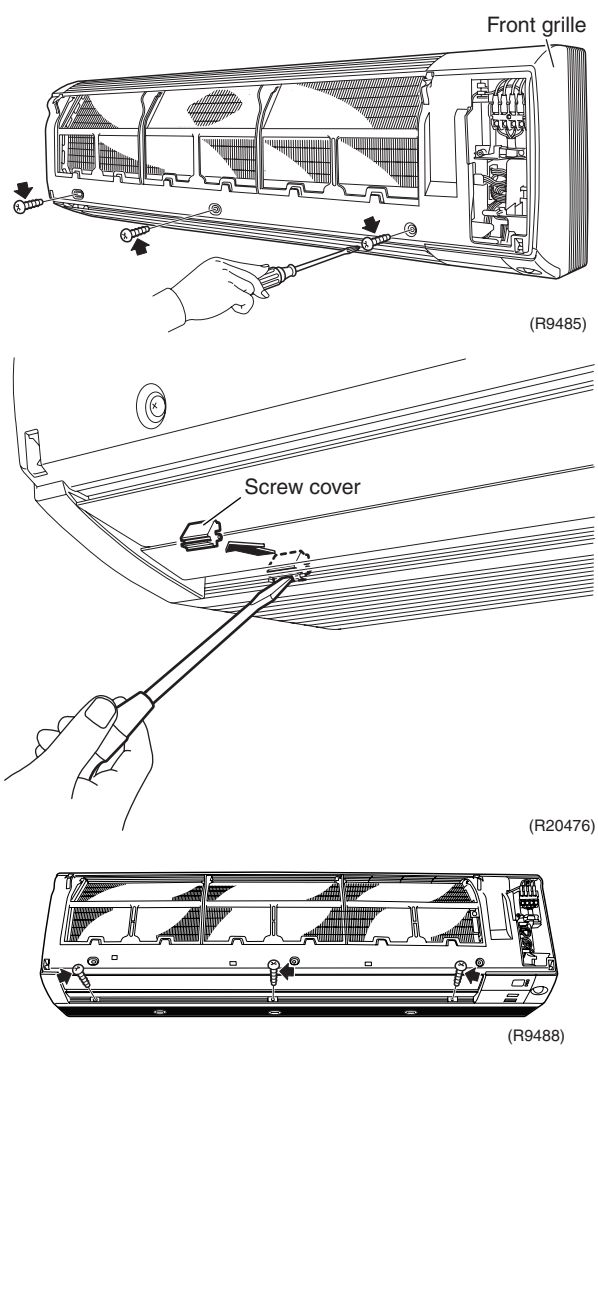


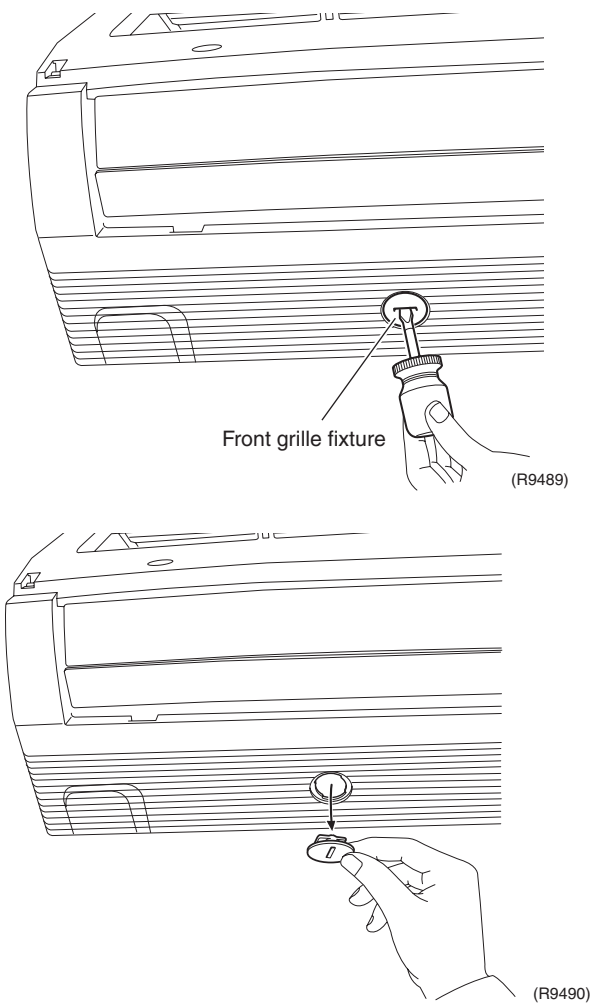
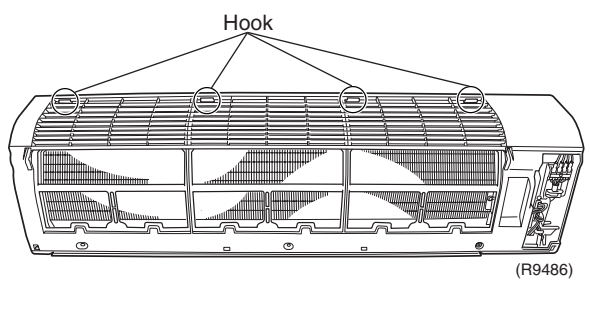
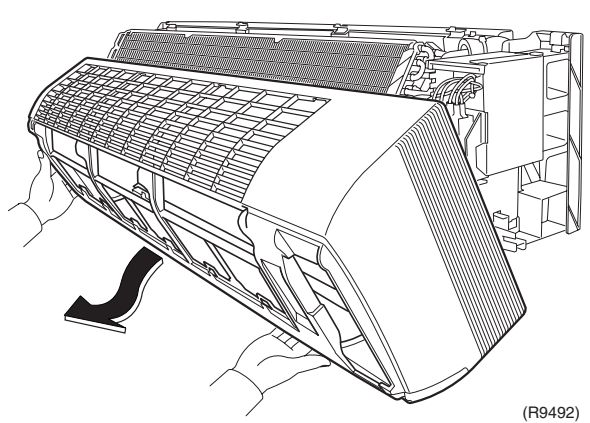
2. Front Grille



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Step	Procedure	Points
<p>1. Remove the service cover.</p> <p>1 Remove the screw and remove the service cover.</p>	 <p>Service cover (R18714)</p>	<p>■ You can remove the front grille without removing the service cover.</p>
<p>2. Remove the front grille.</p> <p>1 Remove the 3 screws of the front grille.</p> <p>2 Remove the 3 screw covers with a flat screwdriver.</p> <p>3 Remove the lower 3 screws.</p>	 <p>Front grille (R9485)</p> <p>Screw cover (R20476)</p> <p>(R9488)</p>	<p>■ Refer to the removal procedure in a reverse way when reassembling.</p>

Step	Procedure	Points
4	Remove the 3 front grille fixtures.	<ul style="list-style-type: none"> ■ The Illustration shows the left fixture.
		
5	Unfasten the 4 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.
		
6	Pull out the upper part of the front grille and lift up the lower part, and then remove the front grille.	<ul style="list-style-type: none"> ■ When reassembling, make sure that all the 4 hooks are fastened as they were.
		

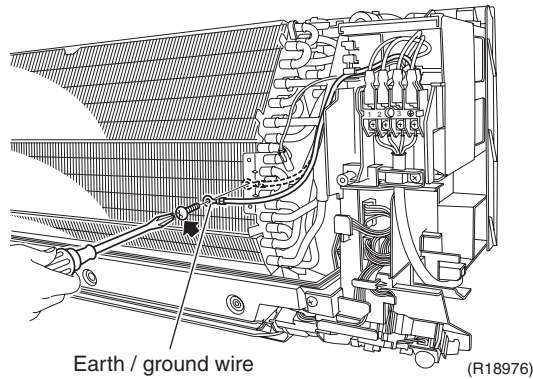
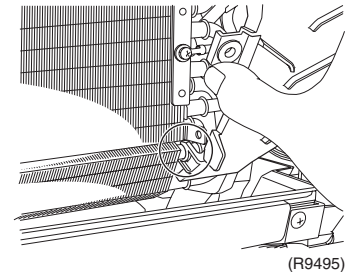
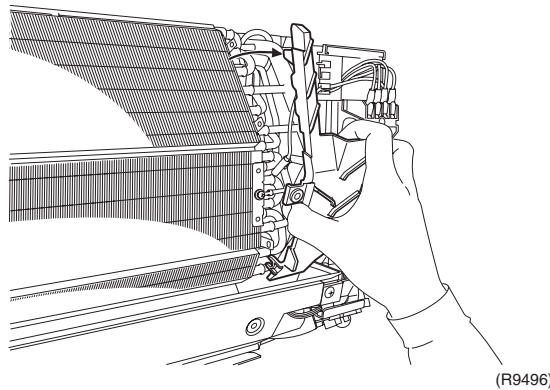
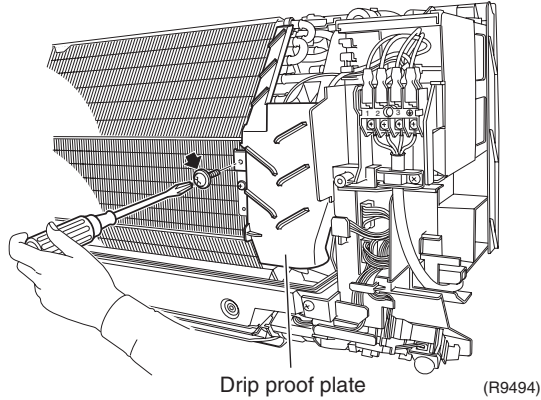
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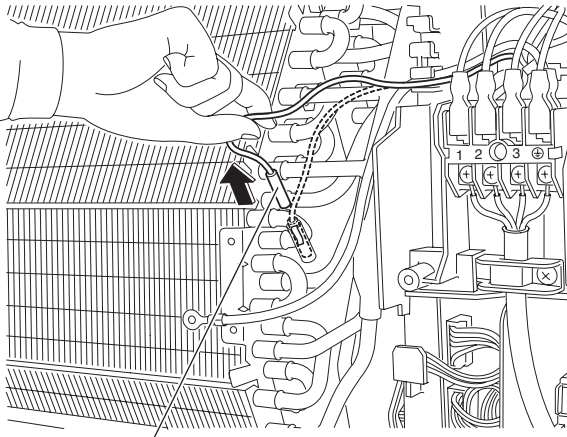
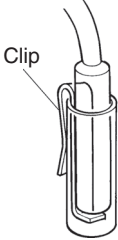
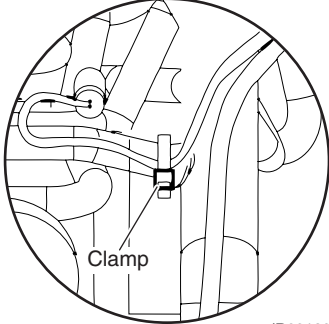
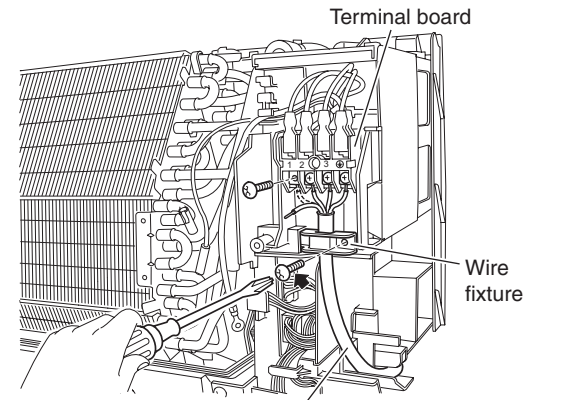
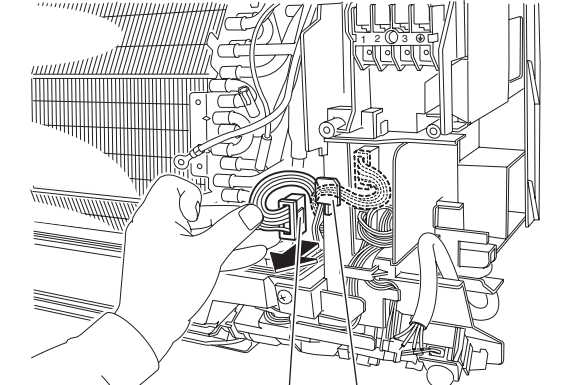
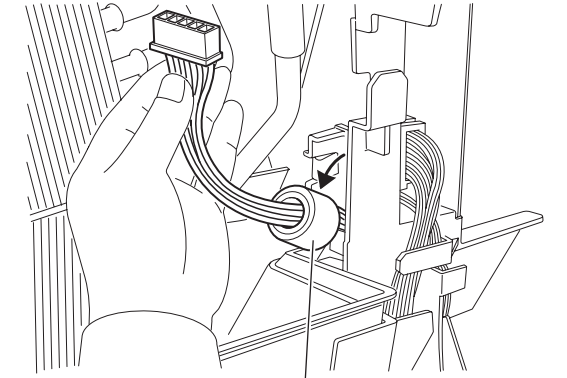


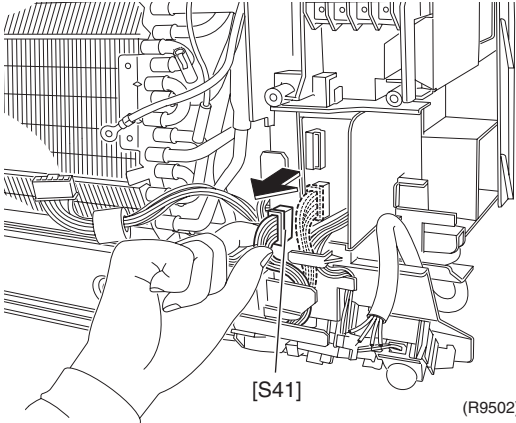
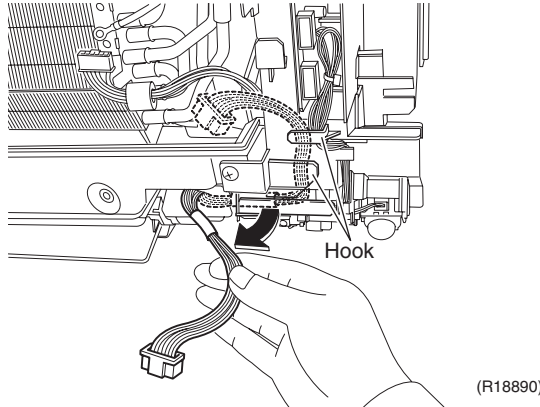
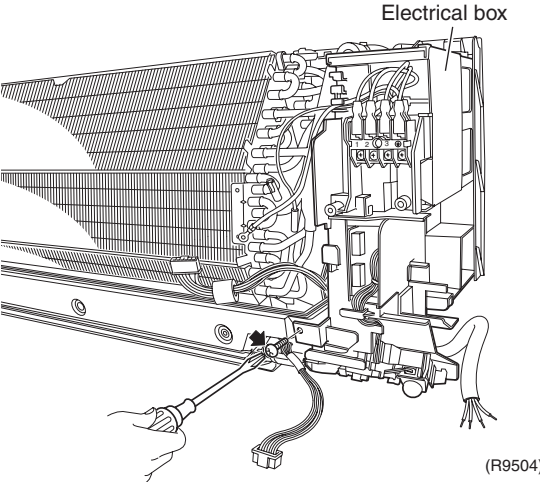
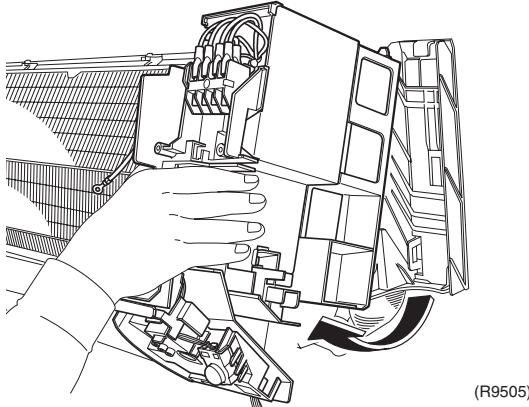
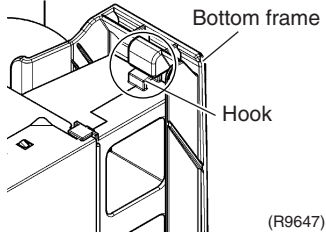
Warning

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Step	Procedure	Points
1	Remove the screw.	<ul style="list-style-type: none"> ■ The shape of the drip proof plate varies by the model.
2	Remove the drip proof plate from the indoor heat exchanger.	<ul style="list-style-type: none"> ■ When reassembling, fit the hook to the indoor heat exchanger.
3	Remove the screw and release the earth / ground wire.	



Step	Procedure	Points
4	Pull out the indoor heat exchanger thermistor.	<ul style="list-style-type: none"> ■ The position of the indoor heat exchanger thermistor varies by the model. ■ Be careful not to lose the clip of the thermistor.
	 <p style="text-align: center;">Indoor heat exchanger thermistor (R22045)</p>	 <p style="text-align: right;">(R11268)</p>
5	Remove the 4 screws on the terminal board and disconnect the connecting wire.	<ul style="list-style-type: none"> ■ Cut the clamp if any.
6	Remove the screw and remove the wire fixture.	 <p style="text-align: right;">(R22132)</p>
	 <p style="text-align: center;">(R18715)</p>	
7	Disconnect the connector [S1] and release the harness from the hook.	[S1]: fan motor
	 <p style="text-align: center;">(R18716)</p>	
8	Release the ferrite core.	
	 <p style="text-align: center;">(R9501)</p>	

Step	Procedure	Points
9	Disconnect the connector [S41].	[S41]: swing motors
		
10	Release the harness from the hooks.	
		
11	Remove the screw of the electrical box.	
		
12	Lift up the electrical box from the bottom frame and remove it.	<ul style="list-style-type: none"> Fit the back hook of the electrical box to the bottom frame when reassembling.
		

4. PCBs

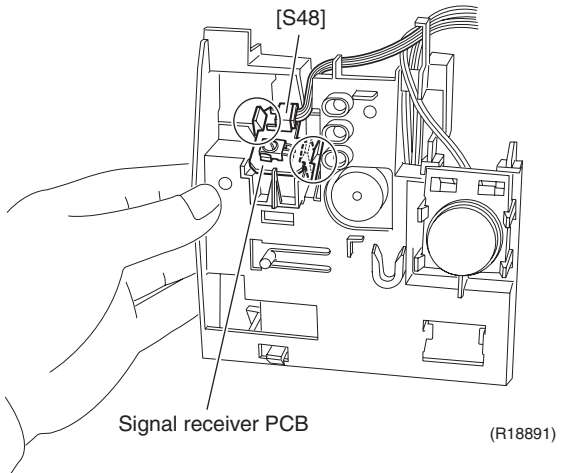
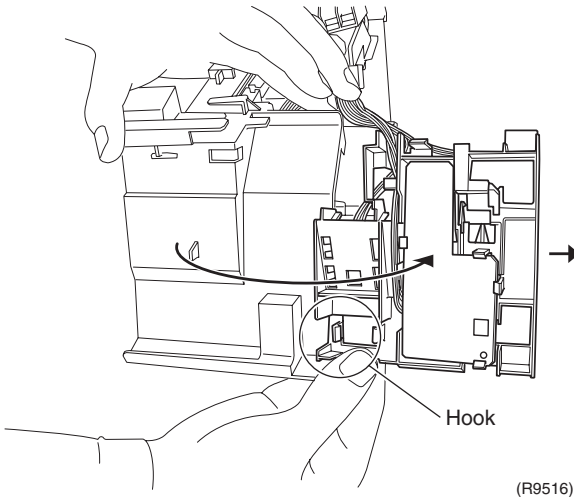
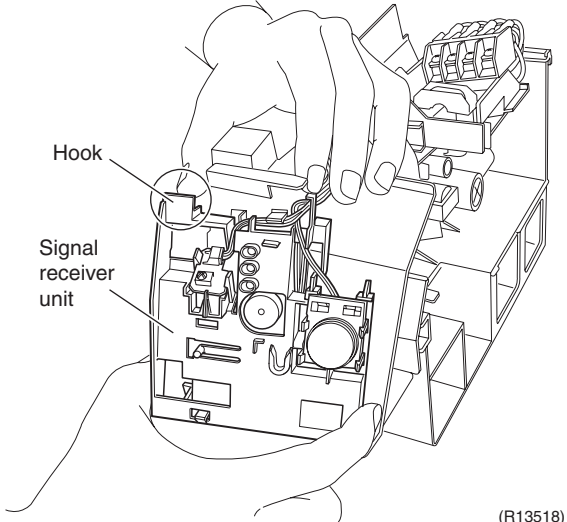
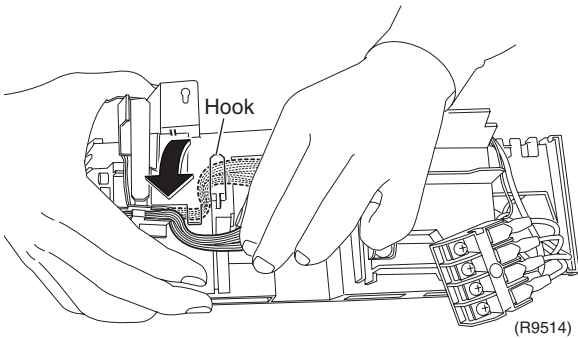


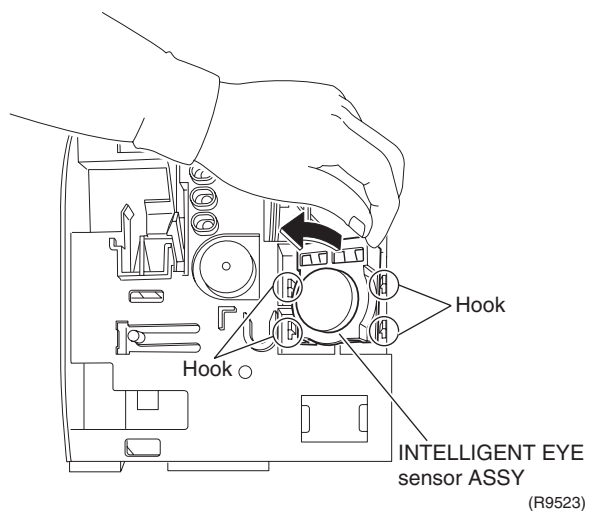
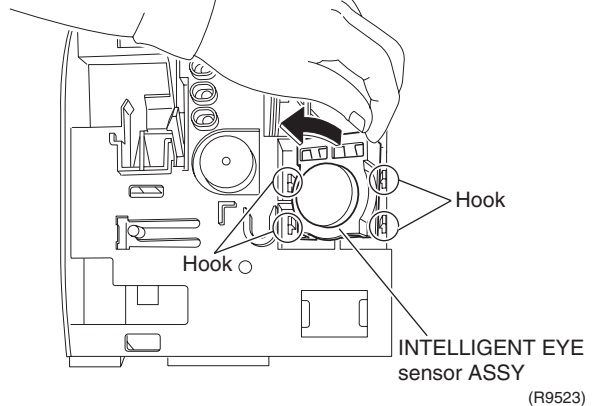
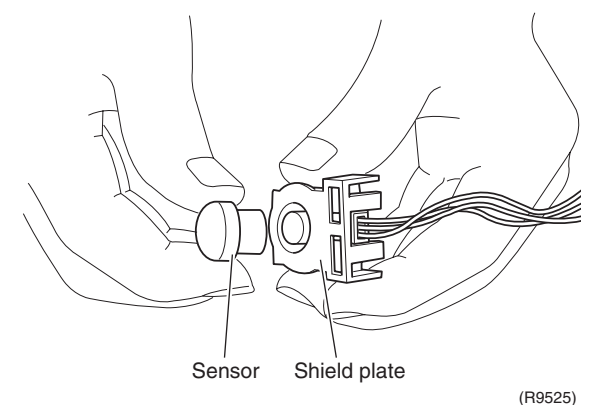
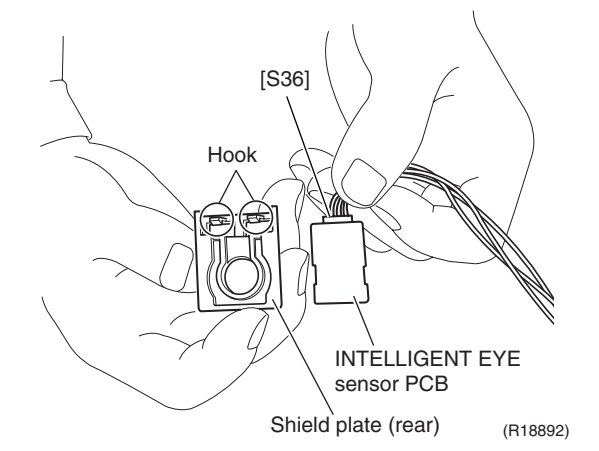
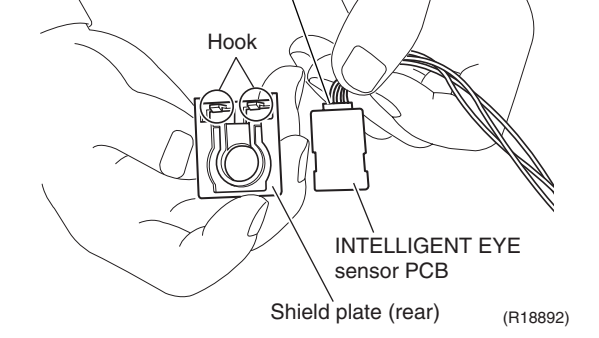
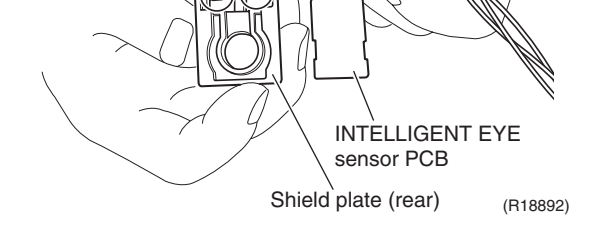
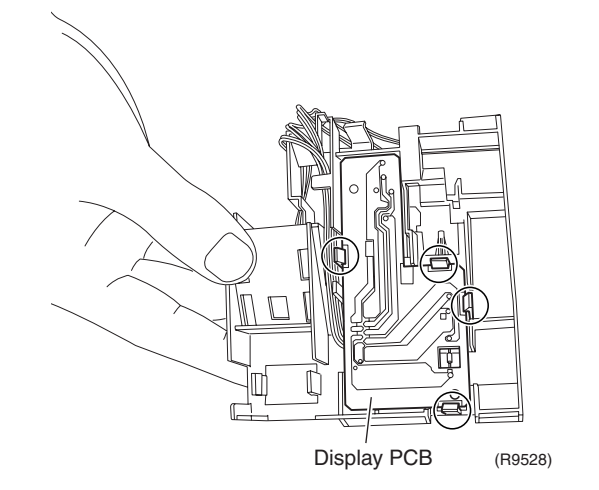
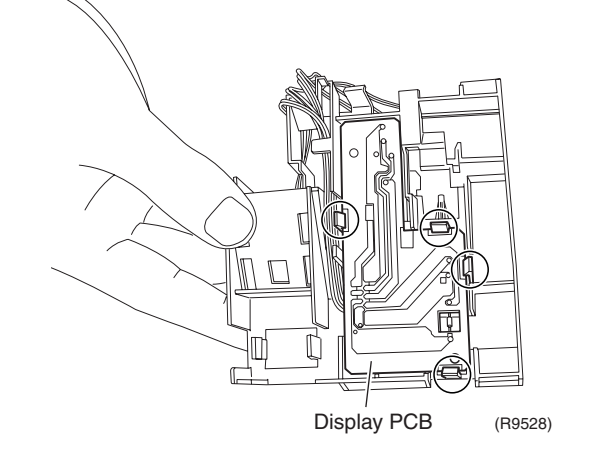
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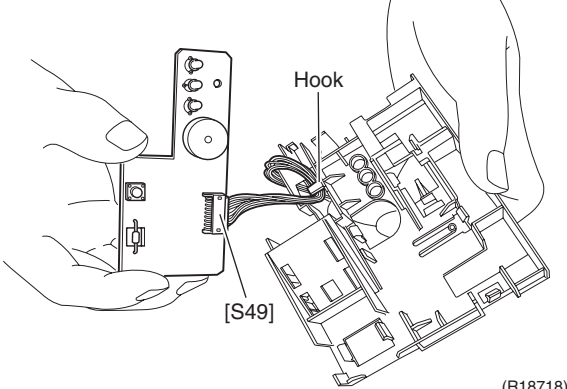
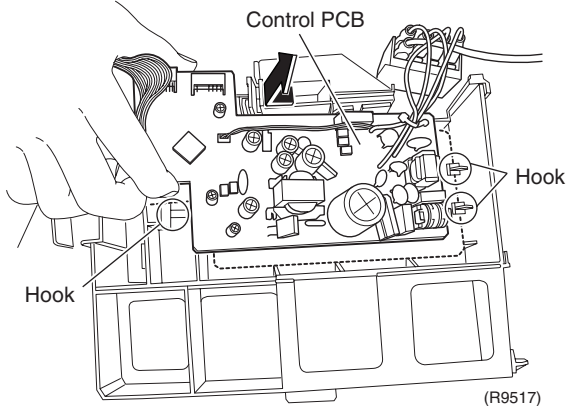
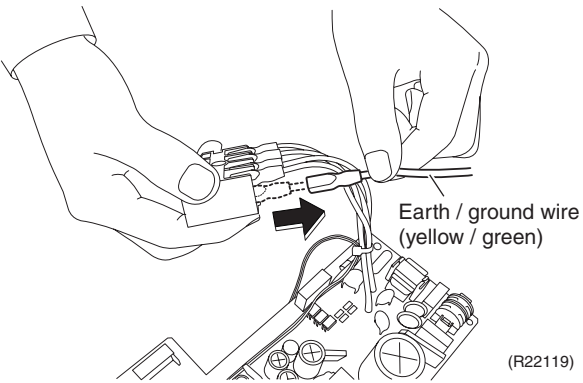
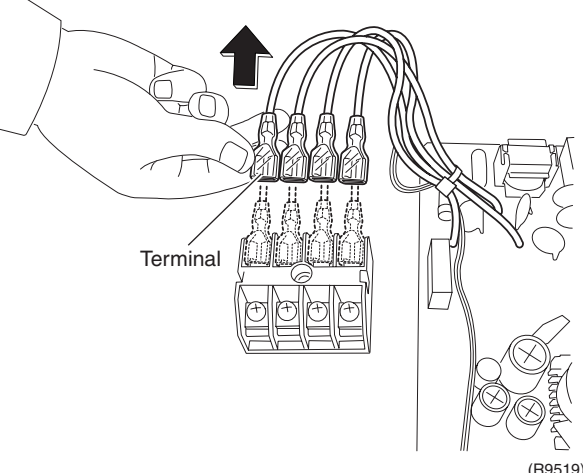
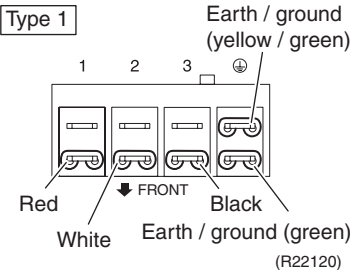
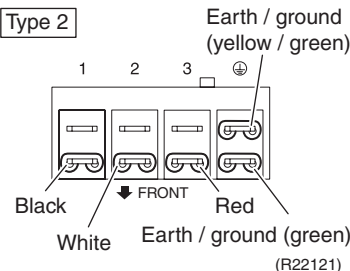
♦ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1. Remove the signal receiver PCB.	<p>(R22131)</p>	
1 Unfasten the 2 hooks of the shield plate.		
2 Open the shield plate and remove it.	<p>(R9507)</p>	<p>■ The shield plate has 2 hooks at the lower part.</p> <p>(R9508)</p>
2 Open the shield plate and remove it.		
3 Remove the screw of the terminal board and remove the terminal board. (1 hook at the back)	<p>(R22255)</p>	
3 Remove the screw of the terminal board and remove the terminal board. (1 hook at the back)		
4 Cut the clamp.	<p>(R9513)</p>	
4 Cut the clamp.		

Step	Procedure	Points
5	Release the harness from the hook.	<ul style="list-style-type: none"> ■ When reassembling, make sure to hook the harness.
6	Push and unfasten the hook of the signal receiver unit.	
7	Open the signal receiver unit.	
8	Unfasten the hook and remove the signal receiver unit.	
9	Unfasten the 2 hooks and remove the signal receiver PCB.	
10	Disconnect the connector [S48].	[S48]: to control PCB



Step	Procedure	Points
2. Remove the INTELLIGENT EYE sensor PCB.		<ul style="list-style-type: none"> Some models do not have the INTELLIGENT EYE sensor PCB.
1. Unfasten the 4 hooks and remove the INTELLIGENT EYE sensor ASSY.		<ul style="list-style-type: none"> When reassembling, set the sensor at the position where it clicks. Otherwise, the sensor is not completely set.
2. Remove the sensor from the shield plate.		<p>[S36]: to control PCB</p>
3. Remove the shield plate by unfastening the 2 hooks.		<p>[S36]: to control PCB</p>
4. Disconnect the connector [S36].		<p>[S36]: to control PCB</p>
5. Remove the INTELLIGENT EYE sensor PCB.		
3. Remove the display PCB.		
1. Unfasten the 4 hooks and remove the display PCB.		

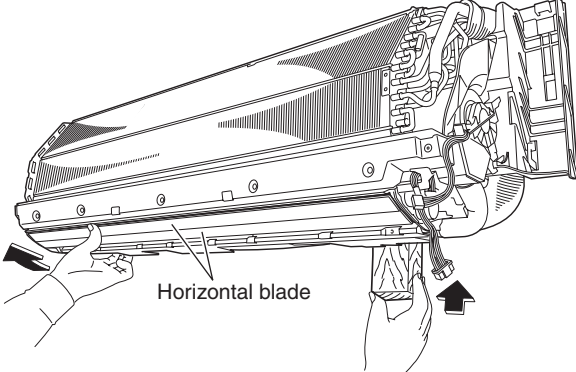
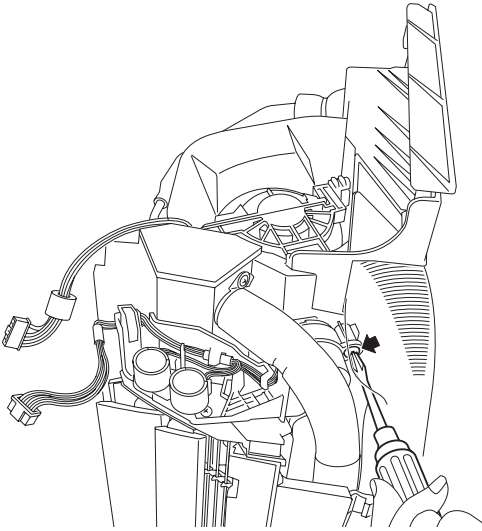
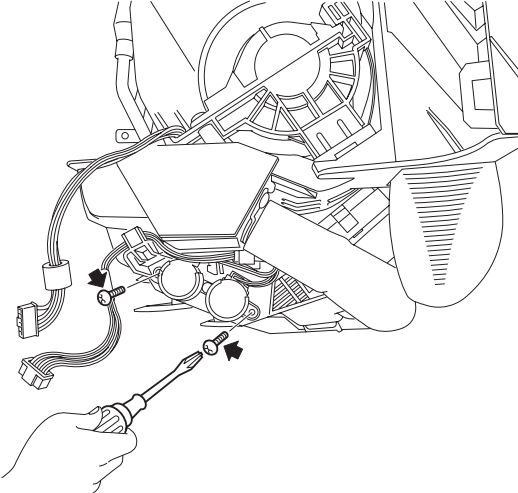
Step	Procedure	Points
<p>2 Release the harness from the hook.</p> <p>3 Disconnect the connector [S49].</p>		<p>[S49]: to control PCB</p>
<p>4. Remove the control PCB.</p> <p>1 Unfasten the 3 hooks and remove the control PCB.</p> <p>2 Pull out the earth / ground wire (yellow / green) from the terminal board.</p> <p>3 Pull out the 4 terminals from the terminal board.</p>	  	<p>■ When reassembling, make sure to connect the connectors as shown in the illustrations below.</p> <p>Type 1</p>  <p>Type 2</p> 

5. Horizontal Blades

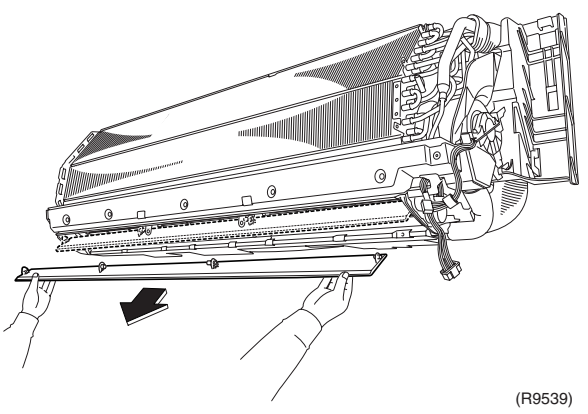
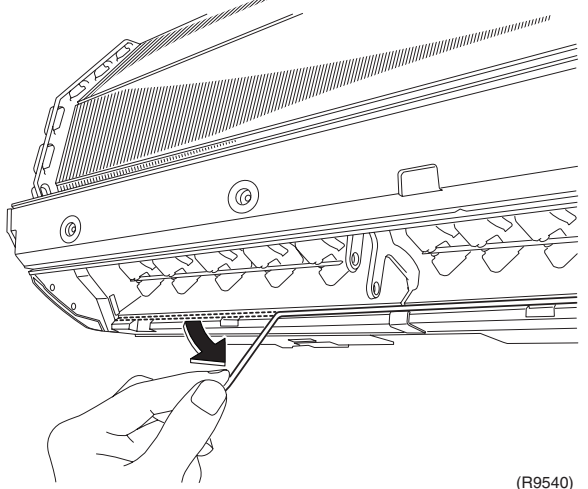
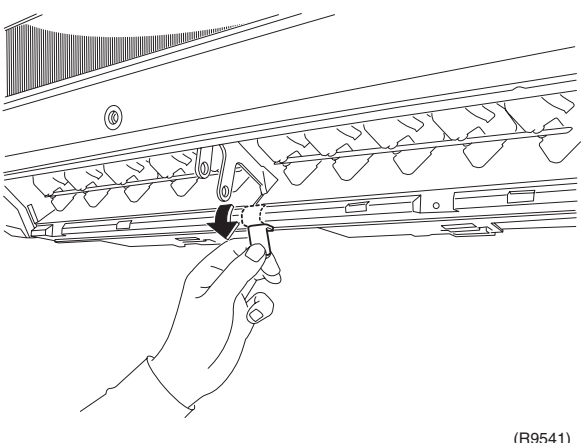


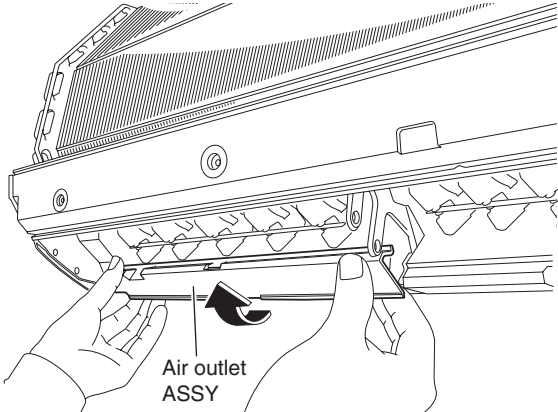
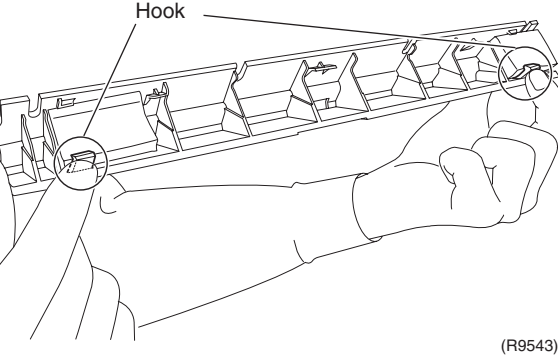
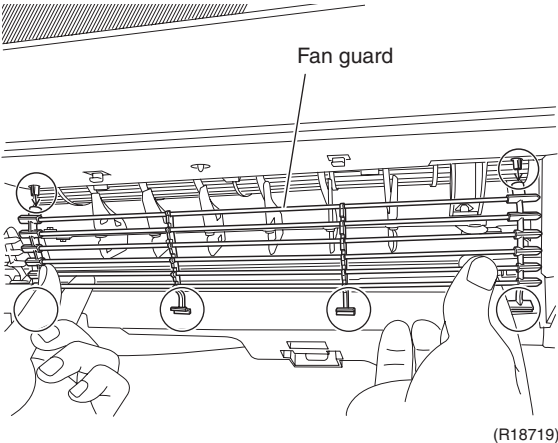
Warning

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Step	Procedure	Points
1. Remove the horizontal blades.	 <p>(R16287)</p>	
2. Remove the screw at the rear of the indoor unit.	 <p>(R9533)</p>	
3. Remove the 2 screws (front and rear).	 <p>(R9534)</p>	

Step	Procedure	Points
4	Release the shafts of the horizontal blade (large) in turn.	<ul style="list-style-type: none"> ■ Removing order (right → left → inner right → inner left)
<p style="text-align: center;">Horizontal blade (large)</p> <p style="text-align: right;">right</p> <p style="text-align: center;">(R19953)</p> <p style="text-align: left;">left</p> <p style="text-align: right;">(R9536)</p> <p style="text-align: center;">inner right</p> <p style="text-align: right;">(R9537)</p> <p style="text-align: left;">inner left</p> <p style="text-align: right;">(R9538)</p>		

Step	Procedure	Points
5	Remove the horizontal blade (large).	
6	Remove the other horizontal blade (small) in the same way.	
 <p style="text-align: right;">(R9539)</p>		
2. Remove the air outlet ASSYs.		
1	Remove the sealing material (horizontal).	
2	Remove the sealing material (vertical, 2 positions).	
 <p style="text-align: right;">(R9540)</p>		
 <p style="text-align: right;">(R9541)</p>		

Step	Procedure	Points
3	Remove the left air outlet ASSY by pushing the 2 hooks at the back.	<ul style="list-style-type: none"> ■ Remove the center and right air outlet ASSYs likewise.
	 <p style="text-align: center;">Air outlet ASSY</p> <p style="text-align: right;">(R9542)</p>	
	 <p style="text-align: center;">Hook</p> <p style="text-align: right;">(R9543)</p>	
4	Unfasten the 4 lower hooks and the 2 upper hooks and remove the fan guard.	<ul style="list-style-type: none"> ■ Remove the other 2 fan guards likewise. ■ Some models have no fan guard.
	 <p style="text-align: center;">Fan guard</p> <p style="text-align: right;">(R18719)</p>	

6. Swing Motors



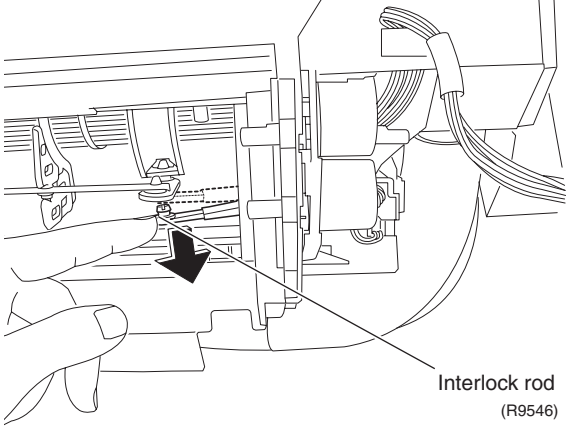
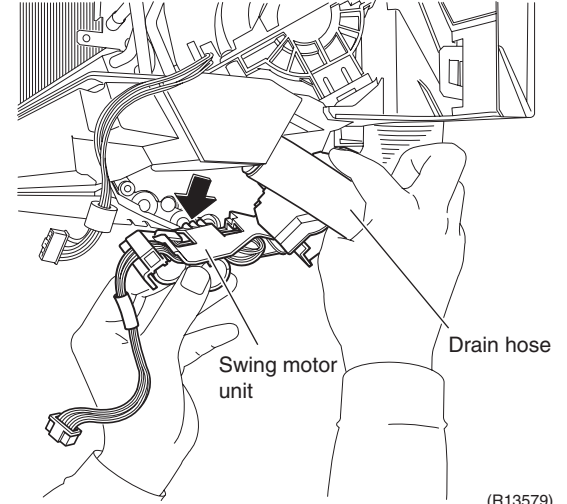
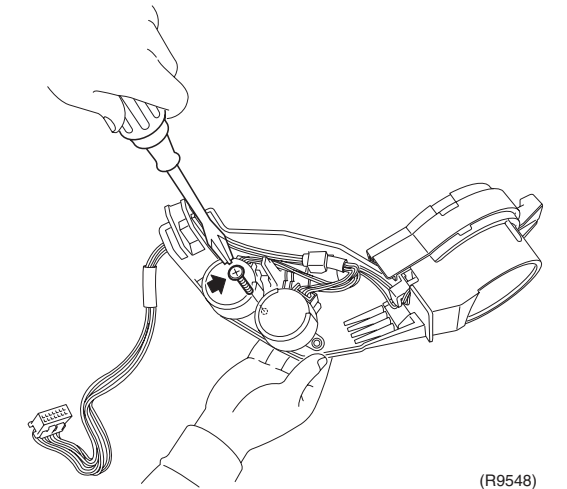
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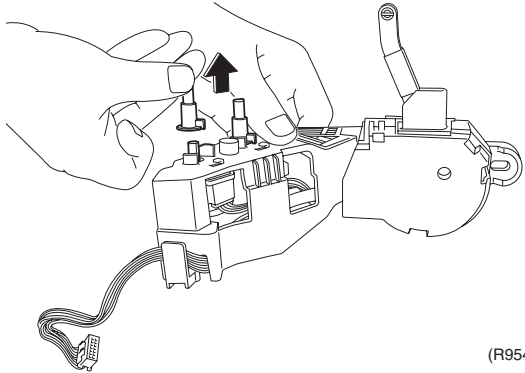
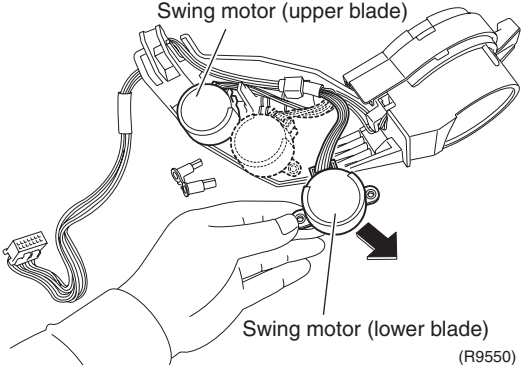
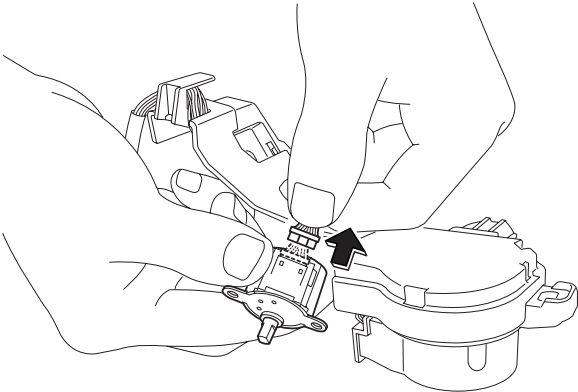
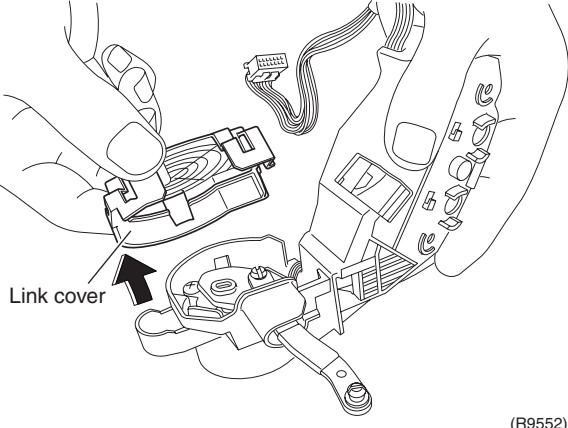
- ◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

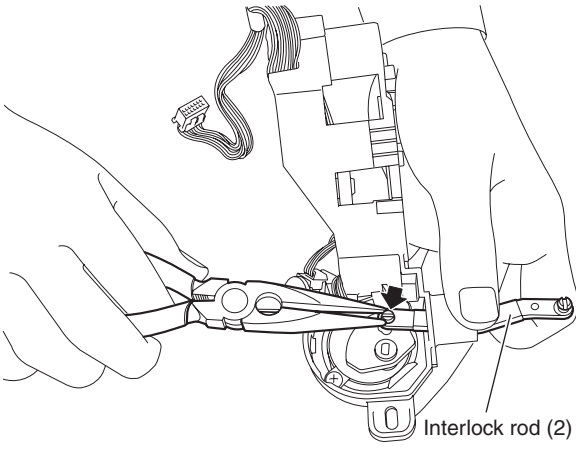
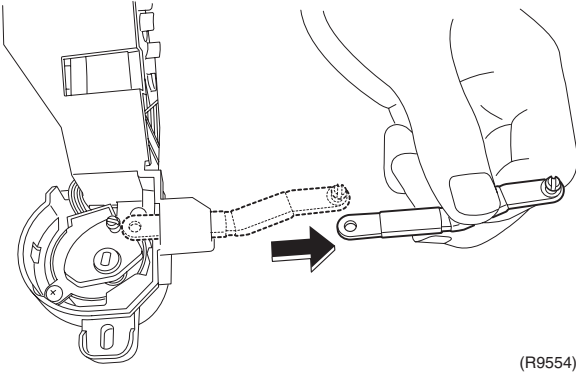
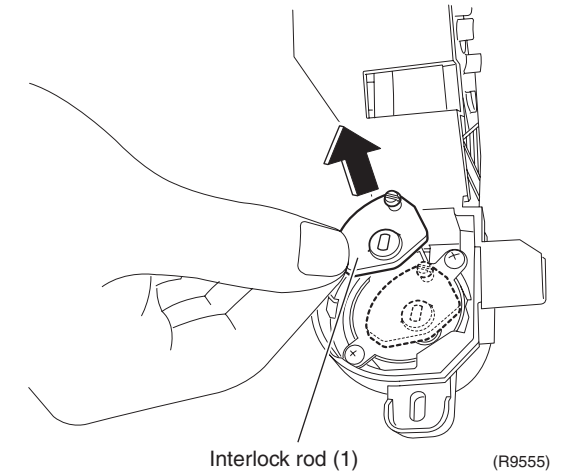
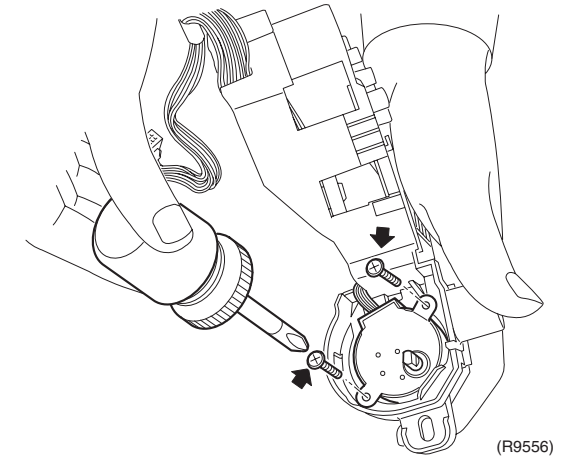


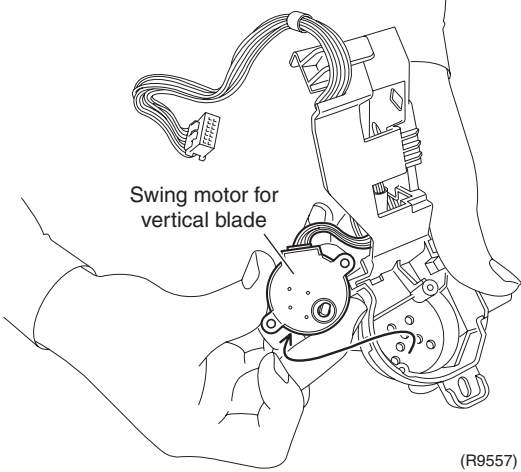
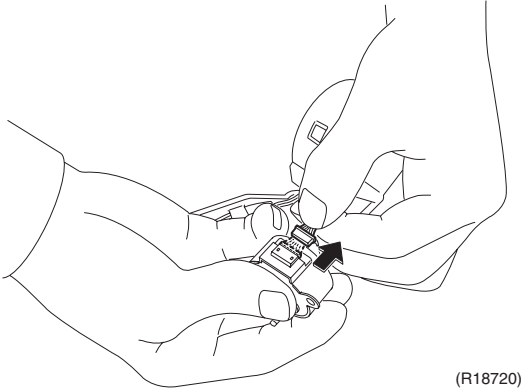
Caution

- ◆ When reassembling, do not confuse the installing order of the 2 motors for horizontal blades and the colors of the connectors. If you set the connectors or motors opposite, the horizontal blades do not move smoothly or noise may be heard.

Step	Procedure	Points
1.	Remove the swing motors for horizontal blades.	
1	Release the interlock rod. 	
2	Pull out the drain hose, then remove the swing motor unit. 	
3	Remove the screw at the center. 	

Step	Procedure	Points
4	Remove the 2 pivots.	<ul style="list-style-type: none"> ■ Reassembling order (1) Set the swing motor for the upper blade first. (connector: white) (2) Then, set the swing motor for the lower blade. (connector: red) (3) Fix both the swing motors with a screw.
5	Remove the swing motors.	 <p style="text-align: right;">(R9549)</p>  <p style="text-align: right;">(R9550)</p>
6	Disconnect the connector to remove the swing motor.	 <p style="text-align: right;">(R9551)</p>
2. Remove the swing motor for vertical blades.		
1	Remove the link cover.	
 <p style="text-align: right;">(R9552)</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>	
4	Remove the 2 screws.	
	 <p>(R9556)</p>	

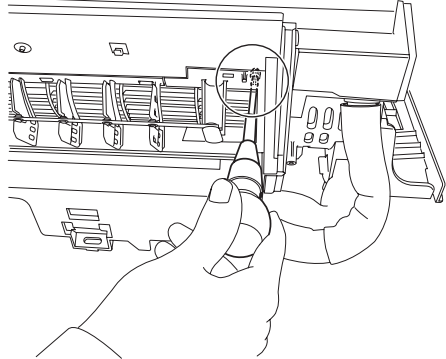
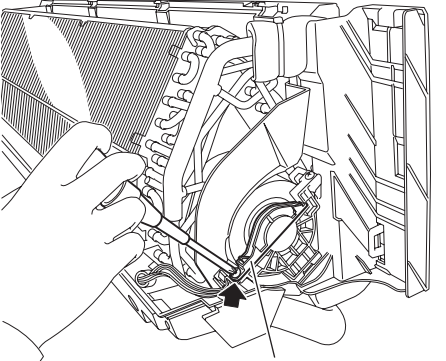
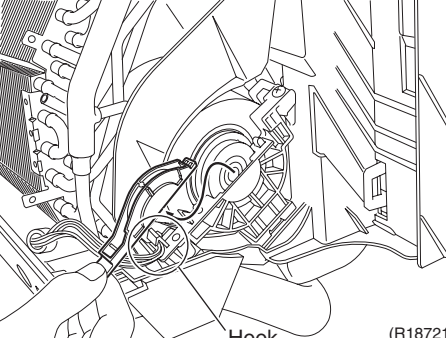
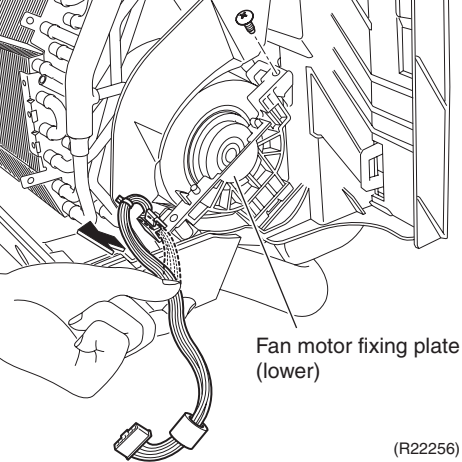
Step	Procedure	Points
5	Remove the swing motor for the vertical blade.	
	 <p>Swing motor for vertical blade</p> <p>(R9557)</p>	
6	Disconnect the connector.	
	 <p>(R18720)</p>	

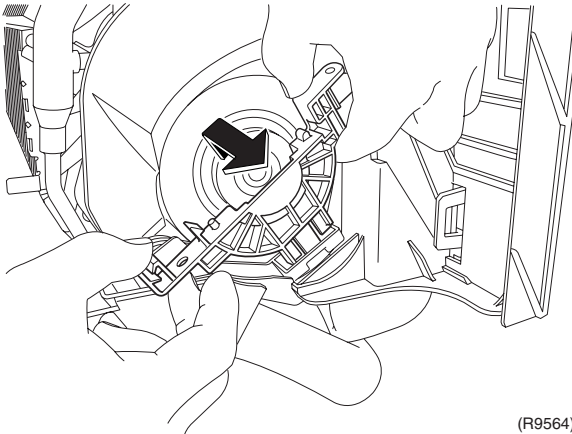
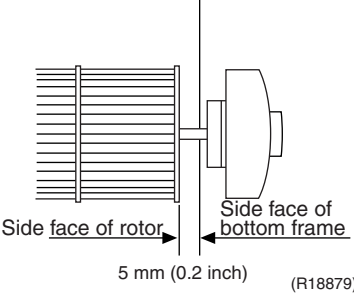
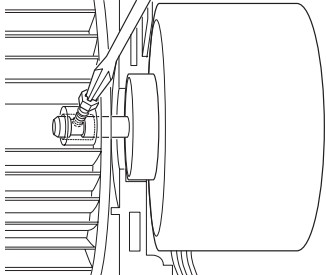
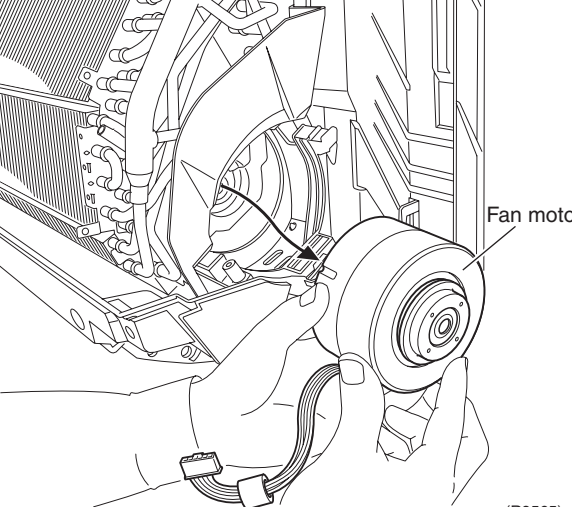
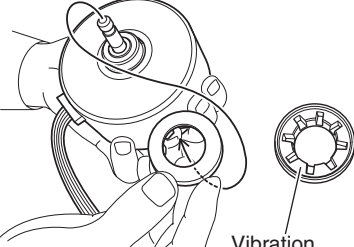
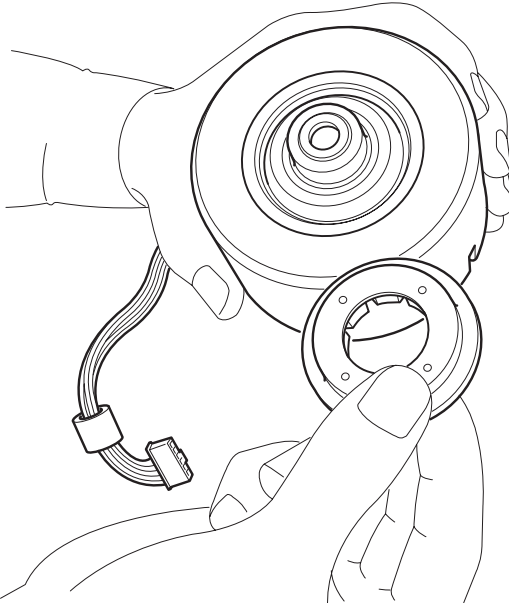
7. Fan Motor (Without Removing Indoor Heat Exchanger)



Warning

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

Step	Procedure	Points
1	Loosen the screw of the fan motor from the air outlet.  (R18722)	
2	Remove the screw of the fan motor fixing plate (upper).  Fan motor fixing plate (upper) (R17238)	
3	Unfasten the hook at the front and remove the fan motor fixing plate (upper).  Hook (R18721)	
4	Release the harness from the hook, and remove the screw of the fan motor fixing plate (lower).  Fan motor fixing plate (lower) (R22256)	

Step	Procedure	Points
5	Remove the fan motor fixing plate (lower).	<ul style="list-style-type: none"> When reassembling the fan motor and the fan rotor, provide as much as 5 mm (0.2 inch) of play between the side face of the rotor and the bottom frame.
6	Remove the fan motor.	 <p>(R9564)</p>  <p>Side face of rotor</p> <p>Side face of bottom frame</p> <p>5 mm (0.2 inch) (R18879)</p>  <p>(R9582)</p> <ol style="list-style-type: none"> Insert the fan motor with approx. 5 mm (0.2 inch) left. Tighten the screw until it stops. Then give the screw one more turn. Rotate the fan rotor and confirm the fan motor and the fan rotor are installed appropriately. Tighten the screw completely if appropriate. If not appropriate, go back to (1).
7	Remove the vibration absorber.	 <p>Fan motor</p> <p>(R9565)</p> <ul style="list-style-type: none"> When reassembling, engage the vibration absorber completely.  <p>Vibration absorber (R9566)</p>  <p>(R9567)</p>

8. Indoor Heat Exchanger



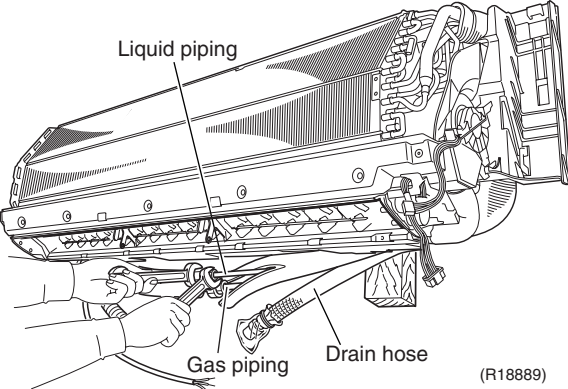
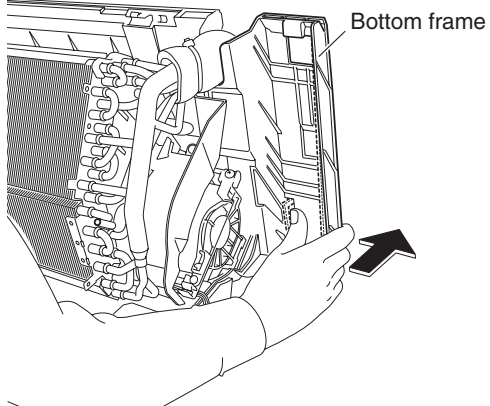
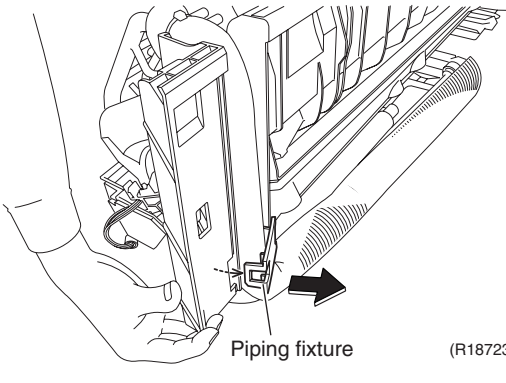
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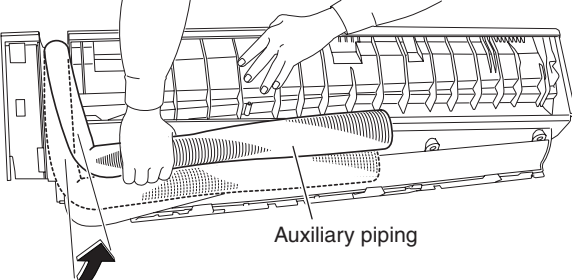
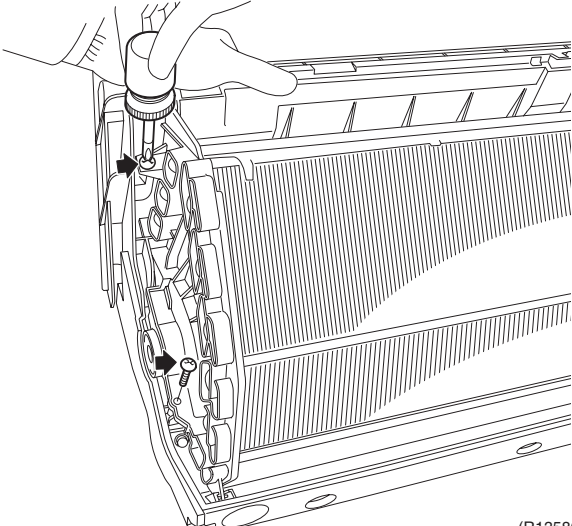
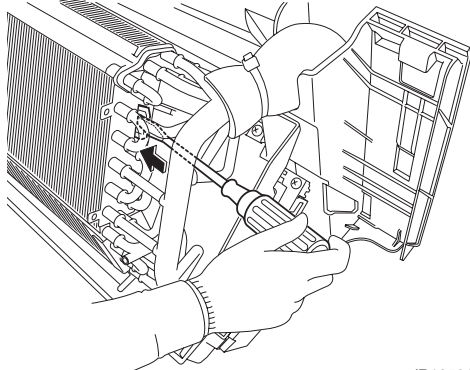
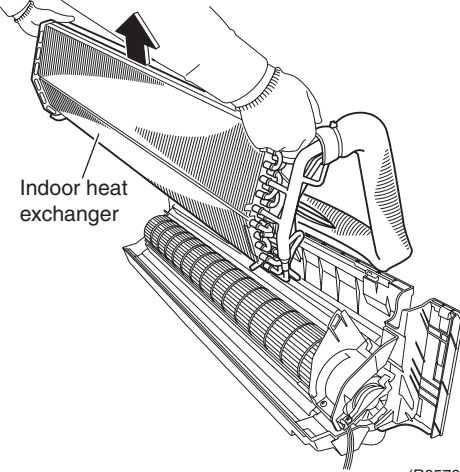
- ◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.
- ◆ In pump-down work, be sure to stop the compressor before disconnecting the refrigerant pipe. If the refrigerant pipe is disconnected with the compressor operating and the stop valve open, air 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	Procedure	Points
1	Pull out the drain hose.		<ul style="list-style-type: none"> ■ Inserting of the wooden base facilitates the removing work. ■ Place a plastic sheet under the drain pan to prevent from wetting the floor with remaining drain. ■ If the drain hose is embedded in the wall, disconnect the drain hose beforehand.
4	Push the bottom frame.		<ul style="list-style-type: none"> ■ Carry out the removal work with 2 wrenches. ■ When the pipings are disconnected, protect both the openings of pipe and unit from entering moisture.
5	Release the piping fixture and remove it.		

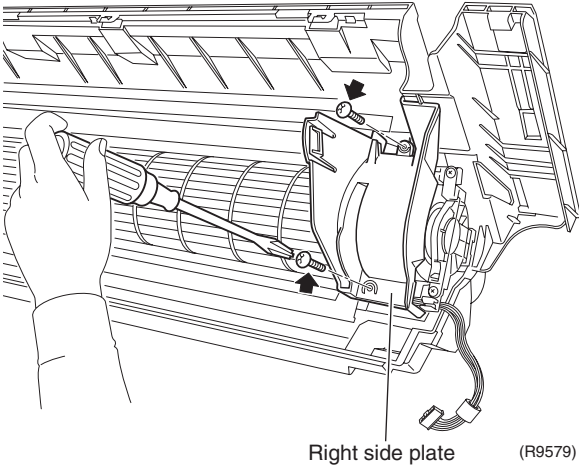
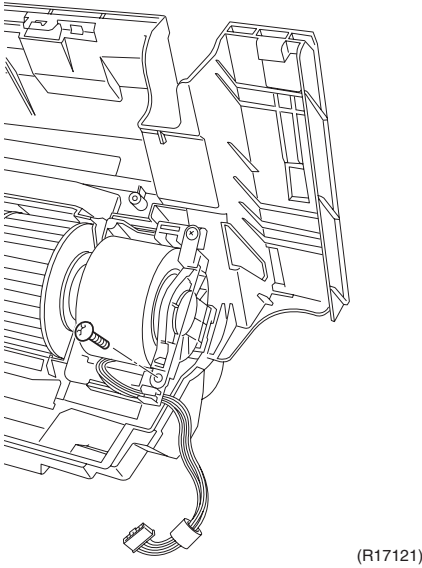
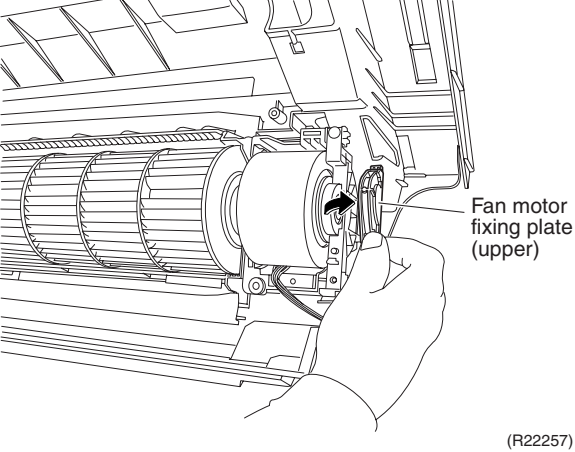
Step	Procedure	Points
6	Slightly widen the auxiliary piping.	
	 <p style="text-align: center;">Auxiliary piping</p> <p style="text-align: right;">(R22046)</p>	
7	Remove the 2 screws on the left side.	
	 <p style="text-align: right;">(R13580)</p>	
8	Push the hook on the right side and unfasten it.	
	 <p style="text-align: right;">(R13581)</p>	
9	Lift up and remove the indoor heat exchanger.	
	 <p style="text-align: center;">Indoor heat exchanger</p> <p style="text-align: right;">(R9578)</p>	

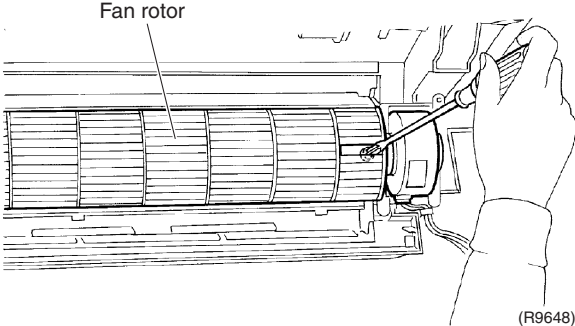
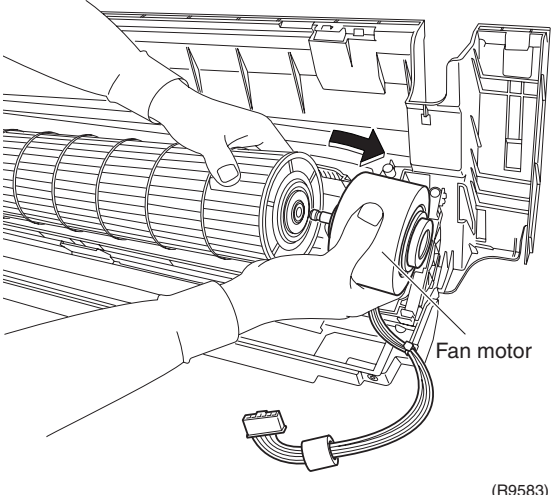
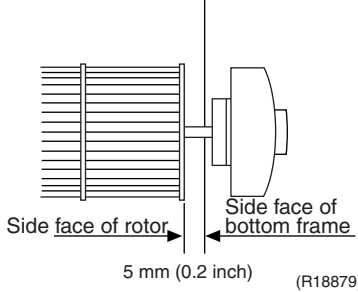
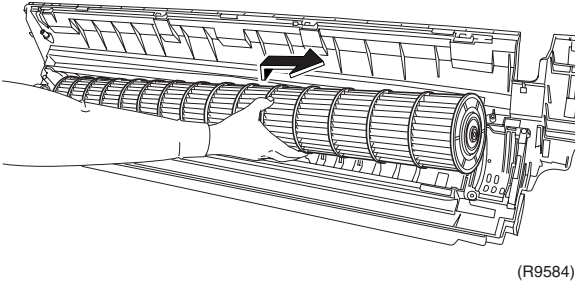
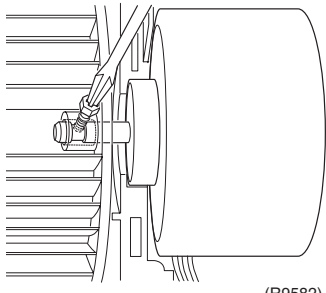
9. Fan Motor / Fan Rotor



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 plate.	
	 <p>Right side plate (R9579)</p>	
2	Remove the screw of the fan motor fixing plate (upper).	
	 <p>(R17121)</p>	
3	Remove the fan motor fixing plate (upper).	
	 <p>Fan motor fixing plate (upper)</p> <p>(R22257)</p>	

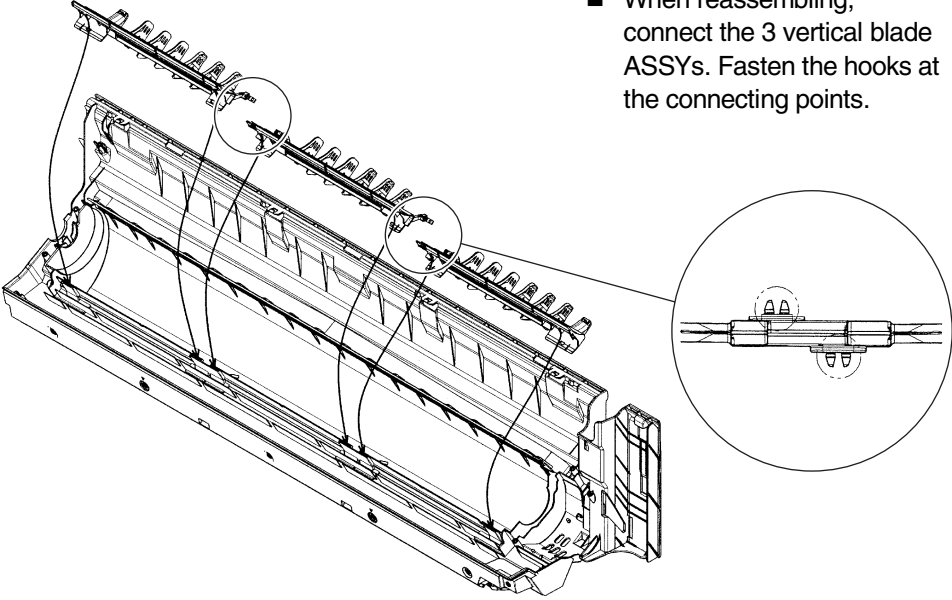
Step		Procedure	Points
4	Loosen the screw of the fan rotor.	 <p>(R9648)</p>	
5	Remove the fan motor.	 <p>(R9583)</p>	<p>■ When reassembling the fan motor and the fan rotor, provide as much as 5 mm (0.2 inch) of play between the side face of the rotor and the bottom frame.</p>  <p>(R18879)</p>
6	Remove the fan rotor.	 <p>(R9584)</p>	 <p>(R9582)</p> <ol style="list-style-type: none"> (1) Insert the fan motor with approx. 5 mm (0.2 inch) left. (2) Tighten the screw until it stops. Then give the screw one more turn. (3) Rotate the fan rotor and confirm the fan motor and the fan rotor are installed appropriately. (4) Tighten the screw completely if appropriate. (5) If not appropriate, go back to (1).

10. 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
1 Unfasten the 2 hooks of each vertical blade ASSY. 2 Remove the 3 vertical blade ASSYs.		<ul style="list-style-type: none"> ■ When reassembling, connect the 3 vertical blade ASSYs. Fasten the hooks at the connecting points. <p>(R16979)</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
04 / 2013	Si041352	First edition
02 / 2014	Si041352EA	Model addition: FTKS71/85JVMG9
06 / 2015	Si041352EB	Model addition: FTKM33NV2S, FTKM28PVMK, FTM71JV14, FTM28NV2S, FTXM71/80/90NVLTL, FTXM28PVMK, FTXM85/95PVMA

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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