

REMOVAL PROCEDURE



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

5.0/6.0/7.1 kW Class



Indoor Unit



Inverter



Wall Mounted Type



Service Manual

Removal Procedure

Indoor Unit

●Cooling Only

ATKM50QRV16
ATKM60QRV16

DTKM50QRV16
DTKM60QRV16

FTHP50RRV16

ATKM50RRV16
ATKM60RRV16

DTKM50RRV16
DTKM60RRV16

FTKM50PRV16
FTKM60PRV16
FTKM71PRV16

ATKP50QRV16
ATKP60QRV16
ATKP71QRV16

DTKP50QRV16
DTKP60QRV16
DTKP71QRV16

FTKM50QRV16
FTKM60QRV16
FTKM71QRV16

ATKP50RRV16
ATKP60RRV16
ATKP71RRV16

DTKP50RRV16
DTKP60RRV16
DTKP71RRV16

FTKM50RRV16
FTKM60RRV16

FTKP50PRV16
FTKP60PRV16

FTKP50QRV16
FTKP60QRV16
FTKP71QRV16

FTKP50RRV16
FTKP60RRV16
FTKP71RRV16

Table of Contents

1. Air Filters / Front Panel	2
2. Horizontal Blade.....	4
3. Front Grille	5
4. Electrical Box	6
5. PCBs.....	8
6. Drain Pan / Swing Motors / Vertical Blade ASSYs.....	11
7. Indoor Heat Exchanger	14
8. Fan Rotor / Fan Motor.....	16



Note:

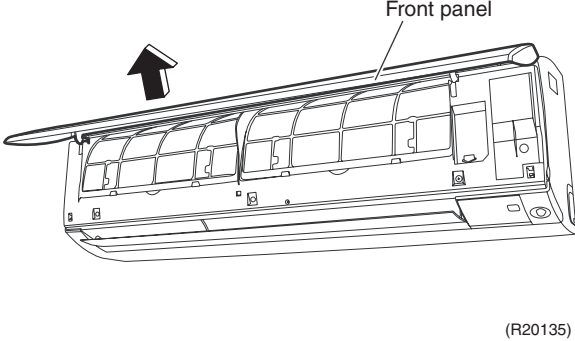
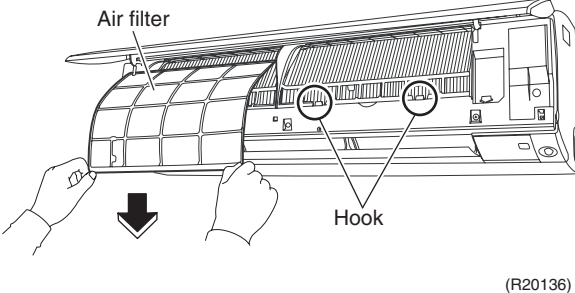
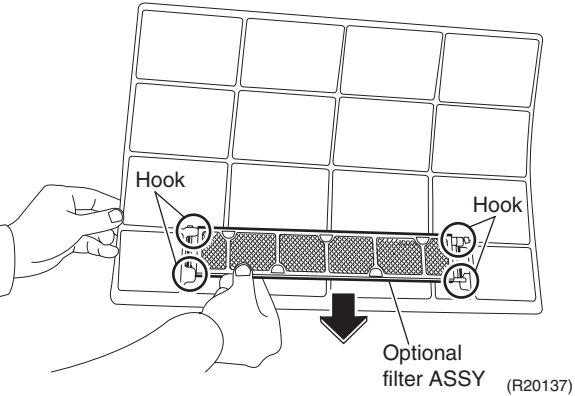
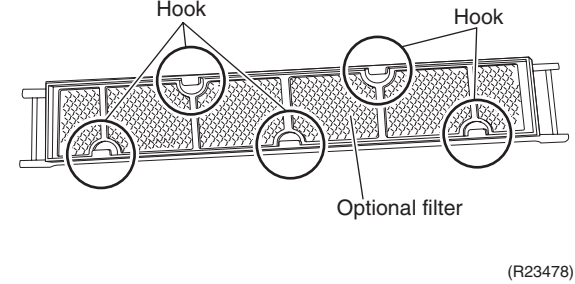
♦ The illustrations may be slightly different depending on the model.

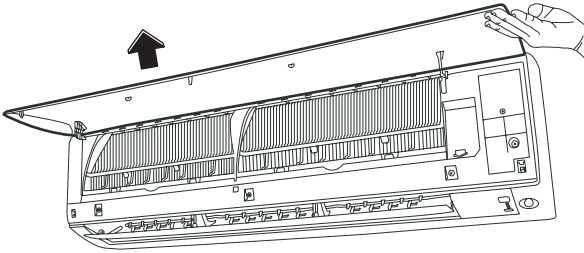
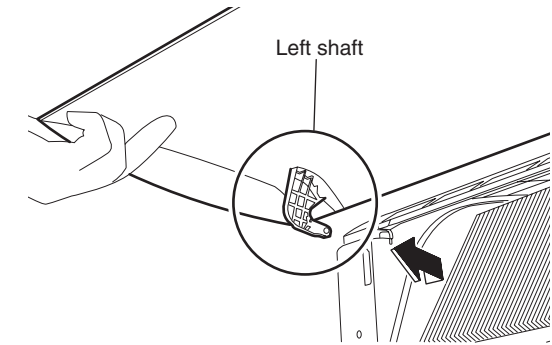
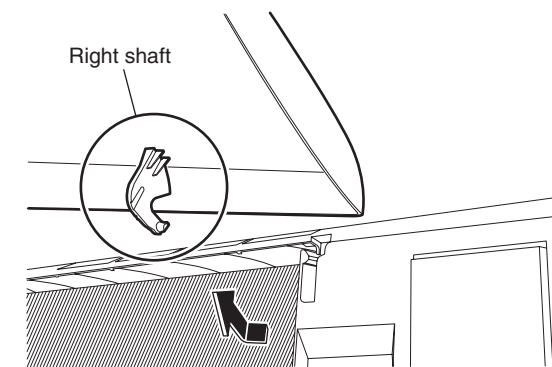
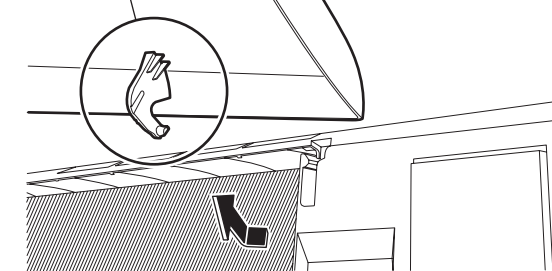
1. Air Filters / Front Panel



Warning

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

Step	Procedure	Points
1. Remove the air filters.		
1 Open the front panel to the position where it stops.	 <p>(R20135)</p>	<ul style="list-style-type: none"> ■ The 2 filters are interchangeable. ■ When reassembling, insert the air filter with the "FRONT" mark faced up. ■ When reassembling, insert the air filter along the guides. ■ Be sure to insert the 2 bottom hooks when reassembling the air filter.
2 Unfasten the 2 hooks, pull out the air filter downward and remove it.	 <p>(R20136)</p>	
3 Remove the other air filter in the same way.		
4 Unfasten the 4 hooks and remove the optional filter ASSY.	 <p>(R20137)</p>	
5 Unfasten the 5 hooks and remove the optional filter.	 <p>(R23478)</p>	

Step	Procedure	Points
2. Remove the front panel.	 <p>(R20139)</p>	<ul style="list-style-type: none"> ■ When reassembling the front panel, fit the right and left shafts one by one into the grooves and fully push them into position.
1	 <p>Left shaft</p> <p>(R23479)</p>	
2	 <p>Right shaft</p> <p>(R23480)</p>	
3	 <p>(R23480)</p>	
4		

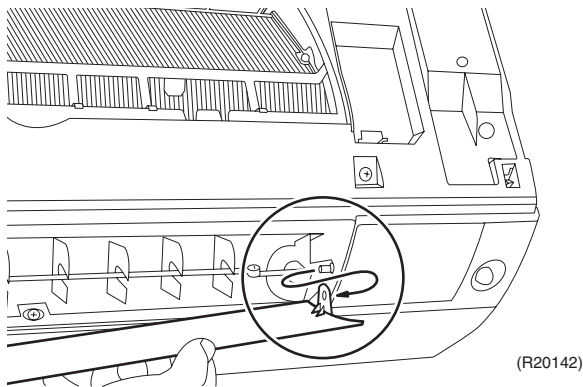
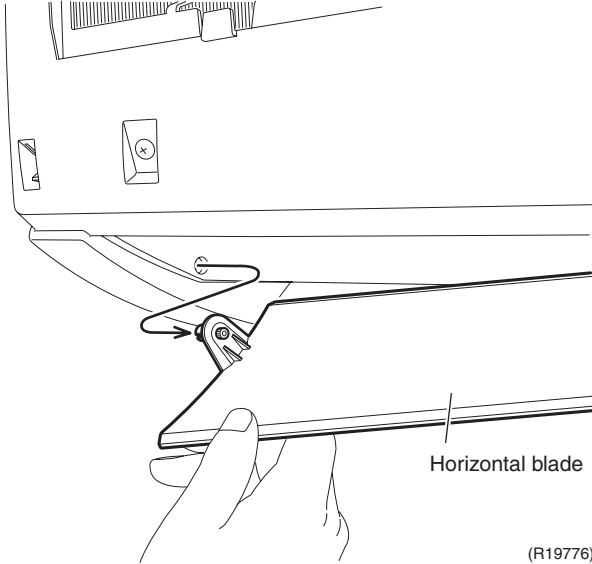
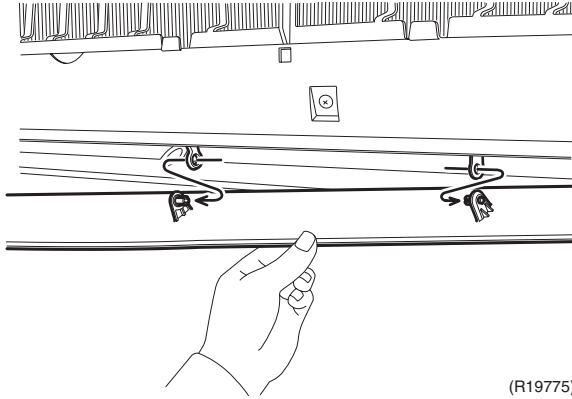
2. Horizontal Blade



Warning

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

Step	Procedure	Points
1	Release the 2 center shafts of the horizontal blade.	
2	Release the left shaft.	
3	Release the right shaft and remove the horizontal blade.	



3. Front Grille



Warning

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

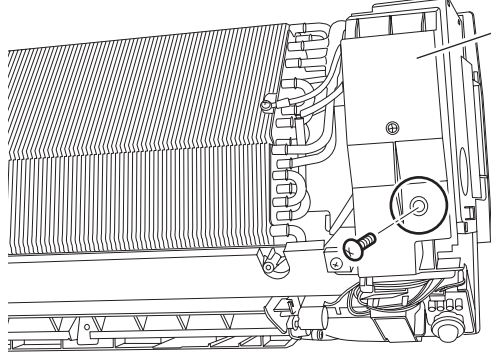
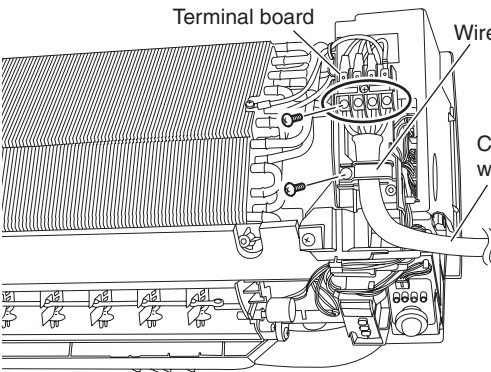
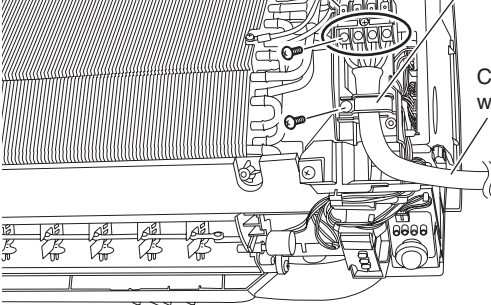
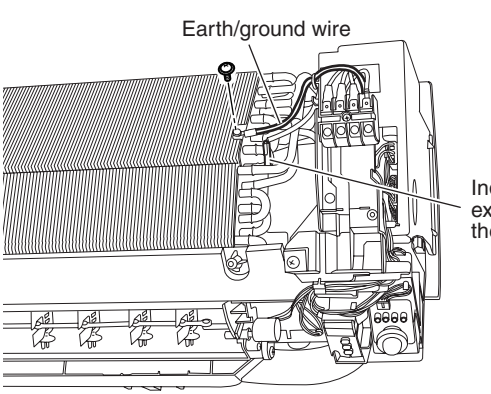
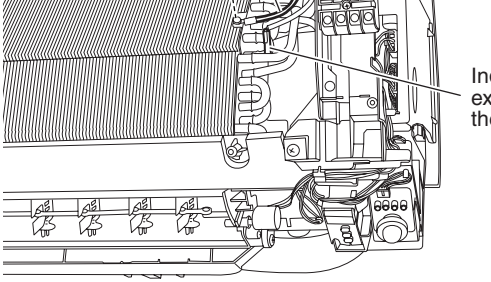
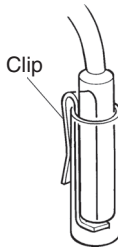
Step	Procedure	Points
1	Remove the 5 screws of the front grille.	
	<p style="text-align: center;">Front grille</p> <p style="text-align: right;">(R20143)</p>	
2	Unfasten the 3 hooks on the top of the front grille.	
	<p style="text-align: center;">Hook</p> <p style="text-align: right;">(R20144)</p>	<p>■ The convex marks (...) on the front panel indicate the position of the hooks.</p>
		<p style="text-align: right;">(R19780)</p>
3	Remove the front grille.	
	<p style="text-align: right;">(R20145)</p>	<p>■ When reassembling, make sure that all the 3 hooks are fastened.</p>

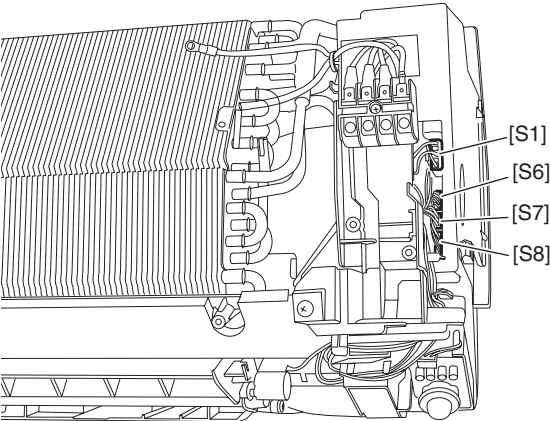
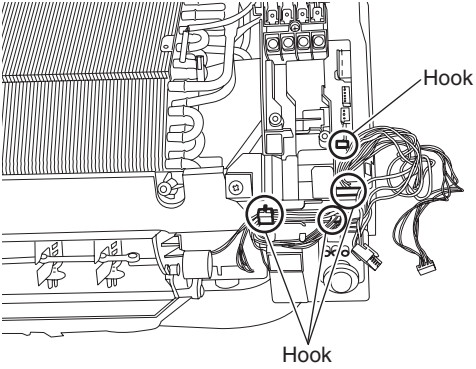
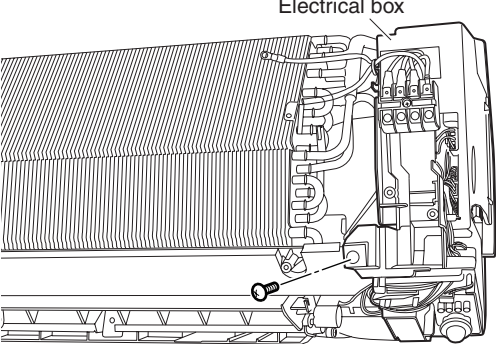
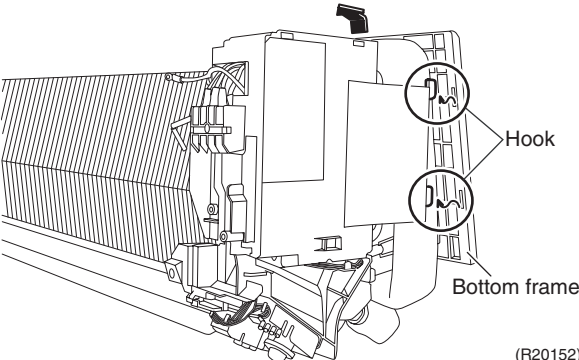
4. Electrical Box



Warning

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

Step	Procedure	Procedure	Points
1	Remove the screw, and then the service cover.	 <p>Service cover (R20146)</p>	
2	Remove the screw, and then the wire fixture.	 <p>Terminal board Wire fixture Connecting wire (R20147)</p>	
3	Remove the 4 screws on the terminal board and disconnect the connecting wire.	 <p>(R20147)</p>	
4	Remove the screw and release the earth/ground wire.	 <p>Earth/ground wire Indoor heat exchanger thermistor (R23481)</p>	<p>■ Be careful not to lose the clip of the thermistor.</p>
5	Pull out the indoor heat exchanger thermistor.	 <p>(R23481)</p>	 <p>Clip (R11268)</p>

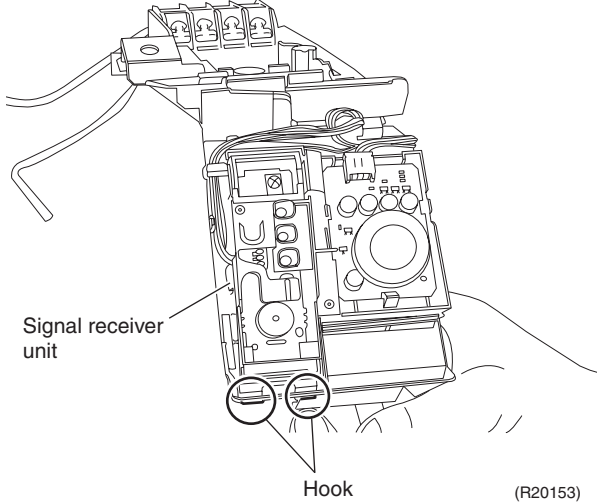
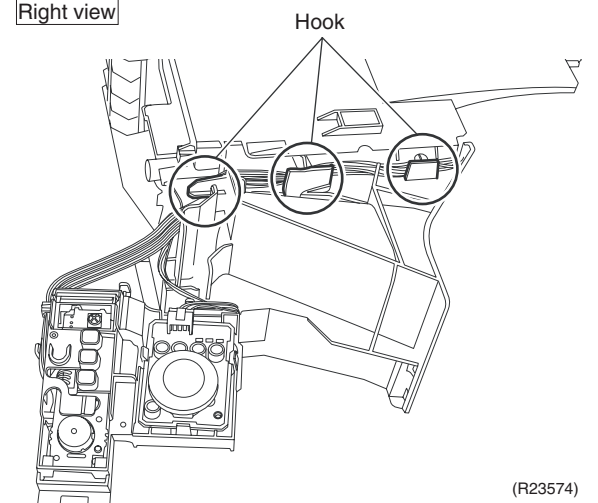
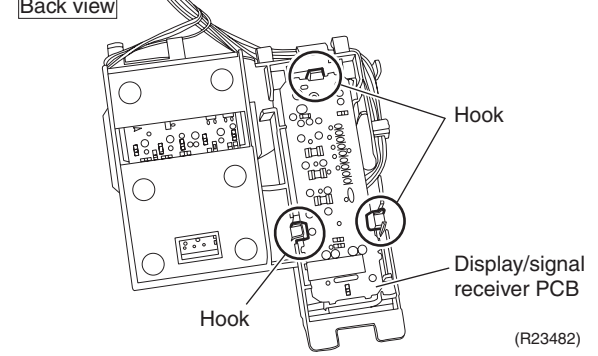
Step		Procedure	Points
6	Disconnect the 4 connectors.	 <p>(R20149)</p>	<p>[S1]: fan motor [S6]: swing motor (horizontal blade) [S7]: fan motor (Hall IC) [S8]: swing motor (vertical blade)</p> <p>■ DC fan motor models do not have harness for [S7].</p>
7	Release the harnesses from the 4 hooks.	 <p>(R20150)</p>	
8	Remove the screw of the electrical box.	 <p>(R20151)</p>	
9	Lift up and remove the electrical box from the bottom frame.	 <p>(R20152)</p>	<p>■ When reassembling, fasten the 2 hooks at the back of the electrical box.</p>

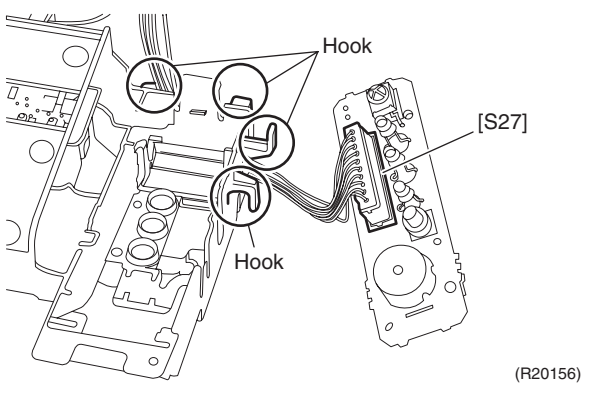
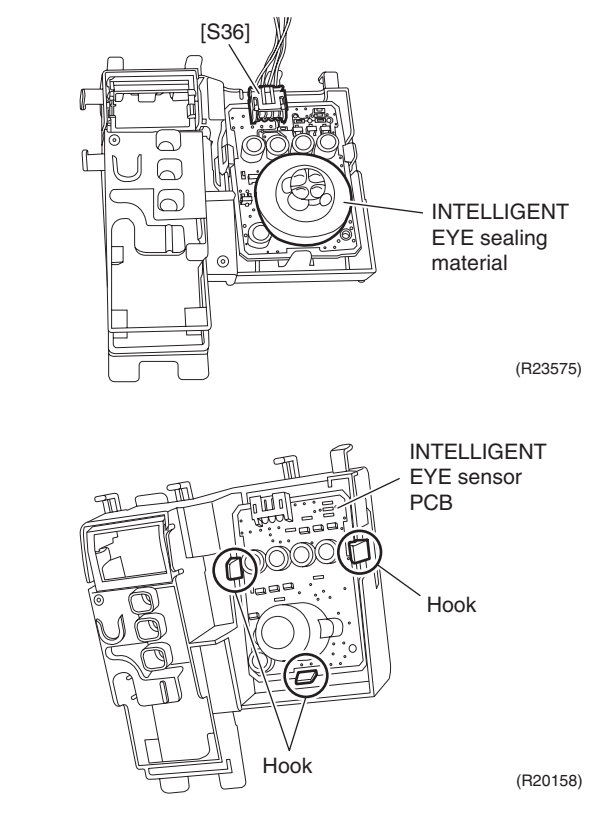
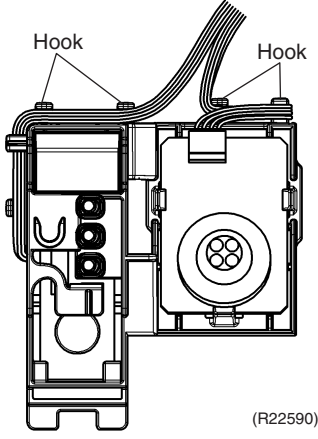
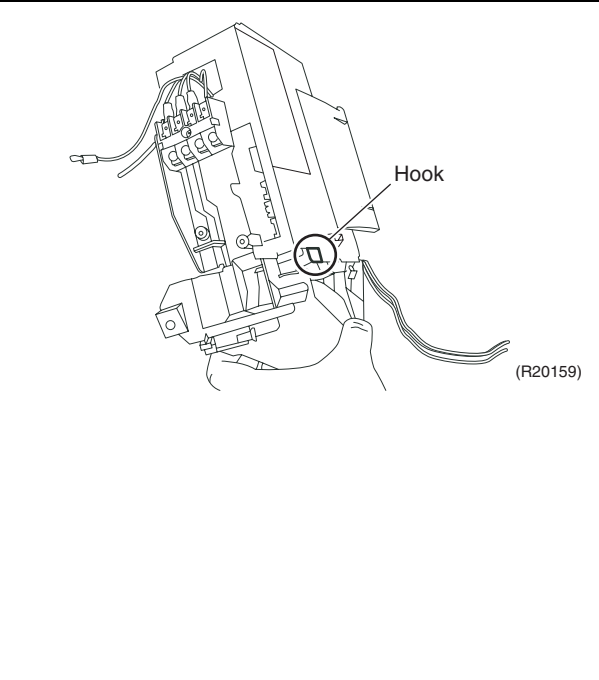
5. PCBs



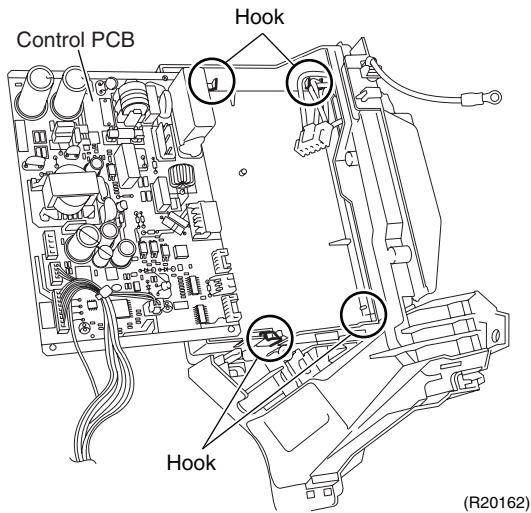
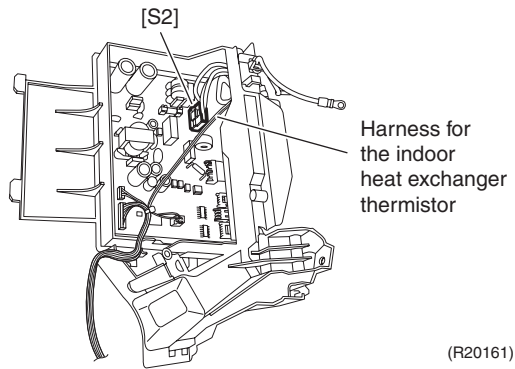
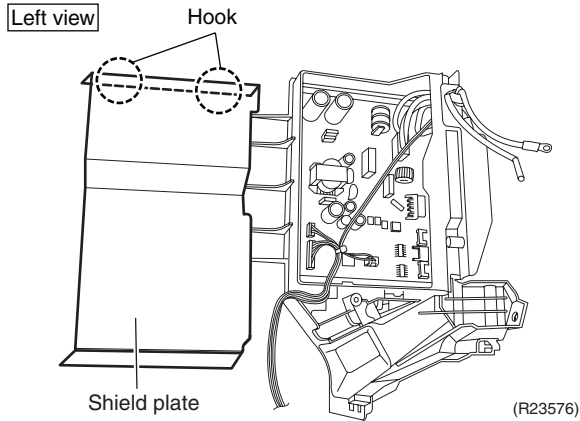
Warning

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

Step	Procedure	Points
1. Remove the display/signal receiver PCB.		
1 Unfasten the 2 bottom hooks and remove the signal receiver unit.		
2 Release the harnesses from the 3 hooks.	<p>Right view</p> 	
3 Unfasten the 3 hooks on the back and remove the display/signal receiver PCB.	<p>Back view</p> 	

Step	Procedure	Points
<p>4 Release the harness from the 4 hooks.</p> <p>5 Disconnect the connector [S27].</p>		<p>[S27]: control PCB</p>
<p>2. Remove the INTELLIGENT EYE sensor PCB.</p> <p>1 Remove the INTELLIGENT EYE sealing material.</p> <p>2 Disconnect the connector [S36].</p> <p>3 Unfasten the 3 hooks and remove the INTELLIGENT EYE sensor PCB.</p>		<p>[S36]: control PCB</p> <ul style="list-style-type: none"> ■ Some models do not have INTELLIGENT EYE sensor. ■ When reassembling, put the harness for [S27] and [S36] on the 4 hooks. 
<p>3. Remove the control PCB.</p> <p>1 Unfasten the hook from the right side of the electrical box.</p>		

Step	Procedure	Points
2	Unfasten the 2 hooks and remove the shield plate.	
3	Disconnect the connector [S2] for the terminal board.	<ul style="list-style-type: none"> ■ Some models have [H1][H2][H3] instead of [S2]. In case of [H1][H2][H3], disconnect the terminals from the terminal board.
4	Pull out the harness for the indoor heat exchanger thermistor from the hole.	<ul style="list-style-type: none"> ■ Terminal board <ul style="list-style-type: none"> 1: black, back 2: white, back 3: red, back
5	Unfasten the 4 hooks and remove the control PCB.	



6. Drain Pan / Swing Motors / Vertical Blade ASSYs



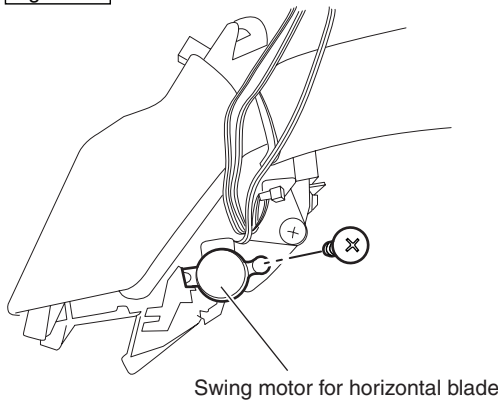
Warning

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

Step	Procedure	Points
1. Remove the drain pan.		<ul style="list-style-type: none"> ■ Insertion of a wooden base facilitates the removing work. ■ Place a plastic sheet around the drain pan to prevent wetting the floor with the remaining drain. ■ If the drain hose is embedded in the wall, disconnect the drain hose beforehand.
2 Unscrew the flare nuts for gas piping and liquid piping. 3 Remove the 2 screws. 4 Detach the indoor unit from the installation plate.		<ul style="list-style-type: none"> ■ Carry out the removal work with 2 wrenches. ■ When the pipings are disconnected, protect the openings of both the pipes and the indoor unit from moisture intrusion.
5 Remove the screw on the back.		
6 Unfasten the hook and remove the drain pan ASSY.		

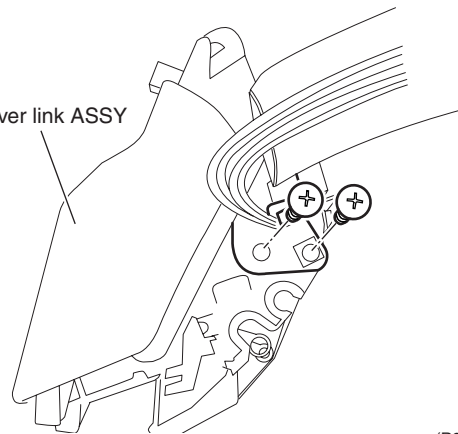
Step	Procedure	Points
2.	Remove the swing motors.	
1	Remove the screw, and then the swing motor for horizontal blade.	
2	Remove the 2 screws of the cover link ASSY.	
3	Remove the 2 screws of the swing motor for vertical blade.	
4 5	Cut the clamp. Remove the swing motor for vertical blade.	

Right view



(R23483)

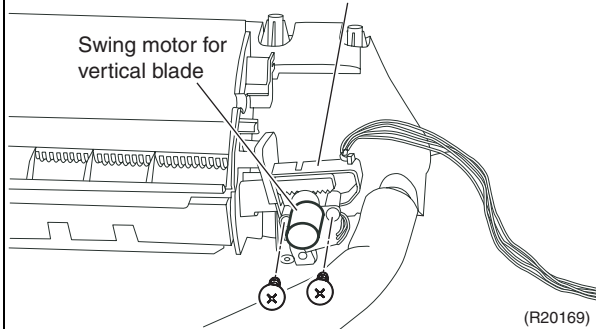
Cover link ASSY



(R23484)

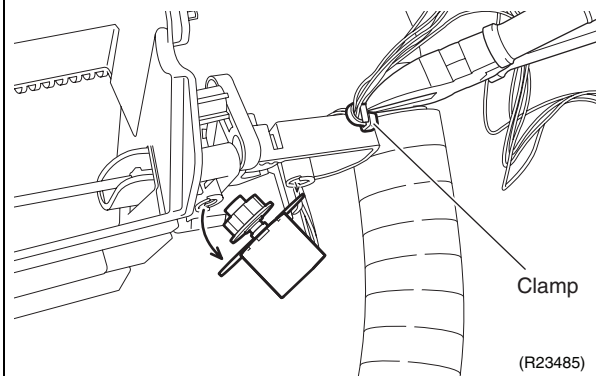
Cover link ASSY

Swing motor for vertical blade

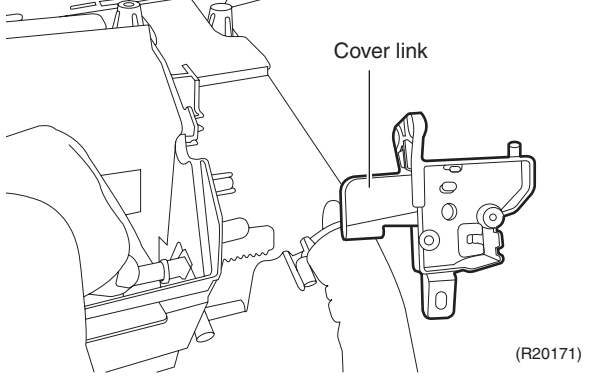
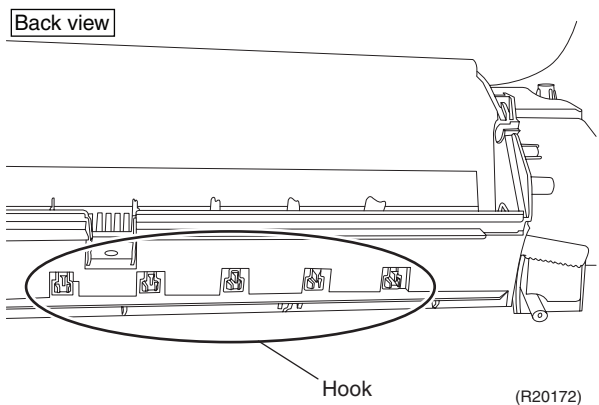
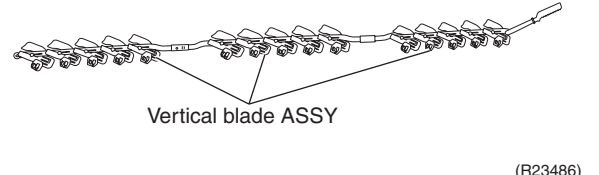


(R20169)

Clamp



(R23485)

Step	Procedure	Points
3.	Remove the vertical blade ASSY.	
1	Remove the cover link.	
	 <p style="text-align: center;">Cover link</p> <p style="text-align: right;">(R20171)</p>	
2	Unfasten all the 5 hooks of each vertical blade ASSY on the bottom of the drain pan ASSY.	
	 <p style="text-align: left;">Back view</p> <p style="text-align: center;">Hook</p> <p style="text-align: right;">(R20172)</p>	
3	Pull out the vertical blade ASSYs.	<p>■ The vertical blade ASSYs are interlinked.</p>
	 <p style="text-align: center;">Vertical blade ASSY</p> <p style="text-align: right;">(R23486)</p>	

7. Indoor Heat Exchanger



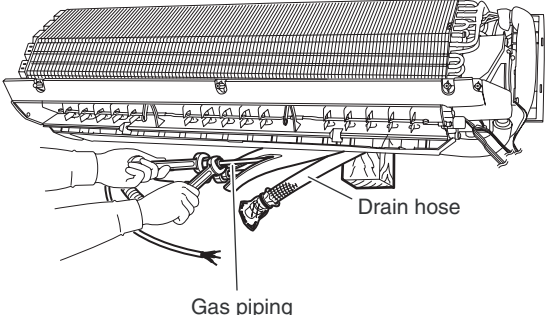
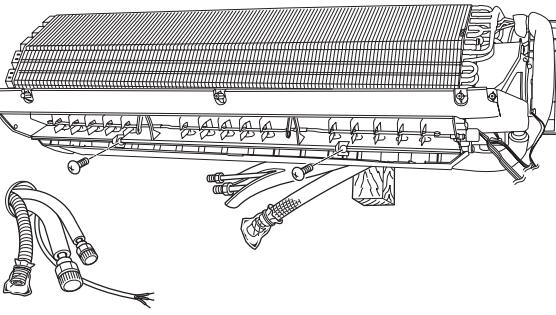
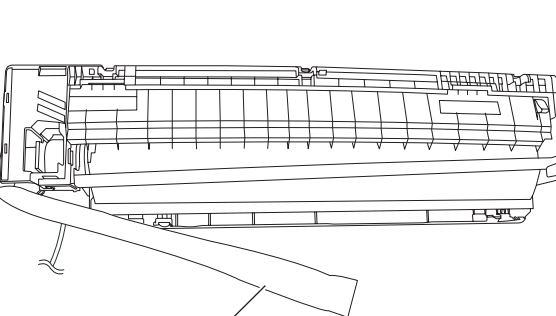
Warning

- ◆ 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.)

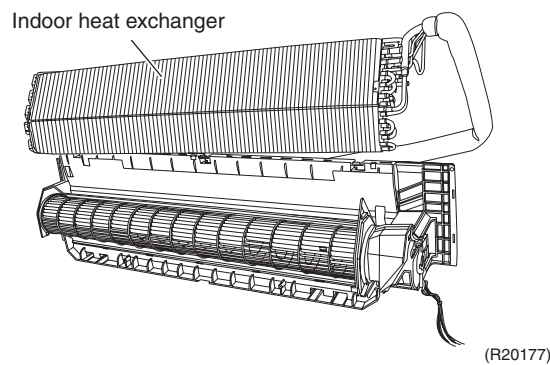
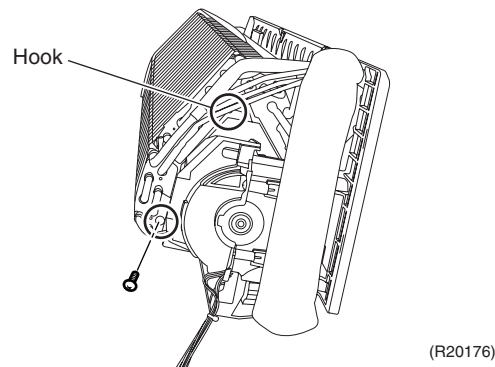
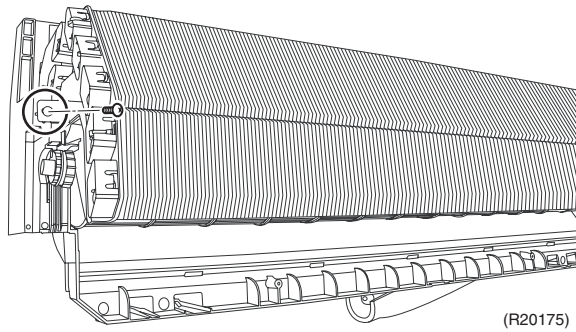


Caution

- ◆ 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	Pull out the drain hose.	 <p style="text-align: right;">(R20163)</p>	<ul style="list-style-type: none"> ■ Indoor heat exchanger can be removed without removing the drain pan. ■ Insertion of a wooden base facilitates the removing work. ■ Place a plastic sheet around the drain pan to prevent wetting the floor with the remaining drain.
2	Unscrew the flare nuts for gas piping and liquid piping.	 <p style="text-align: right;">(R20164)</p>	<ul style="list-style-type: none"> ■ 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 the openings of both the pipes and the indoor unit from moisture intrusion.
3	Remove the 2 screws.	 <p style="text-align: right;">(R20174)</p>	
4	Detach the indoor unit from the installation plate.		
5	Slightly pull out the auxiliary piping.		

Step	Procedure	Points
6	Remove the screw on the left side.	
7	Remove the screw on the right side.	
8	Push the hook on the right side and unfasten it.	<ul style="list-style-type: none"> ■ When reassembling, fasten the hook of the indoor heat exchanger.
9	Lift up and remove the indoor heat exchanger.	



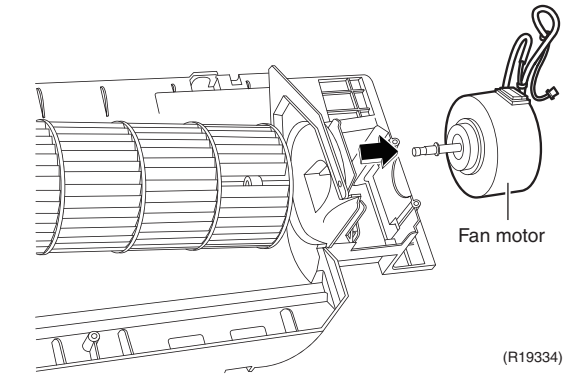
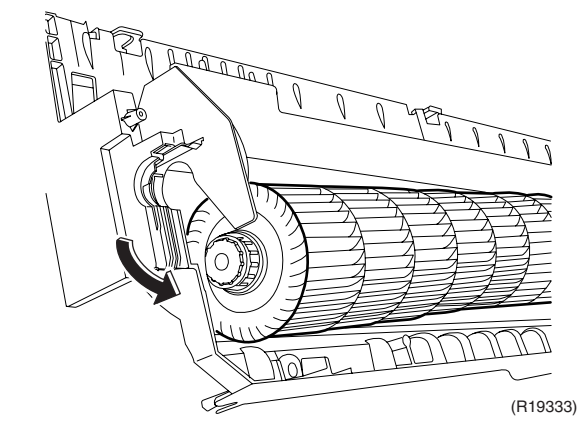
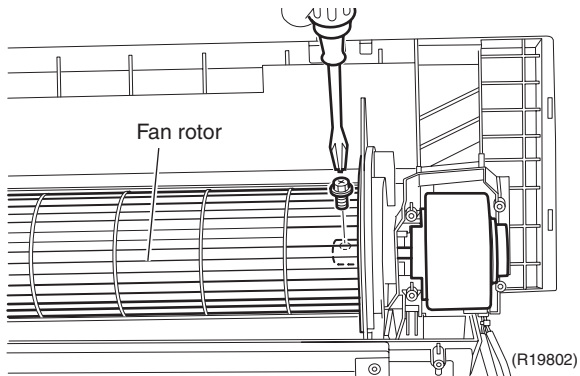
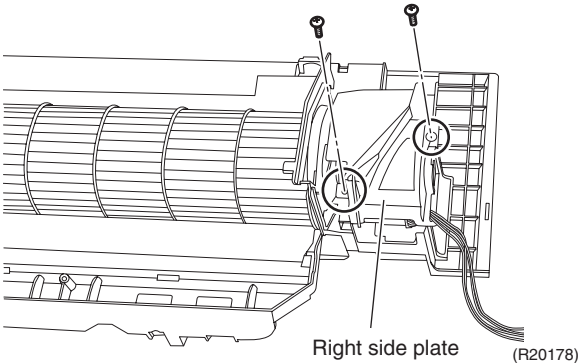
8. Fan Rotor / Fan Motor



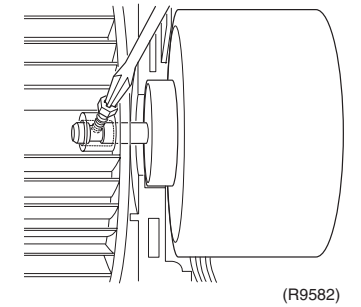
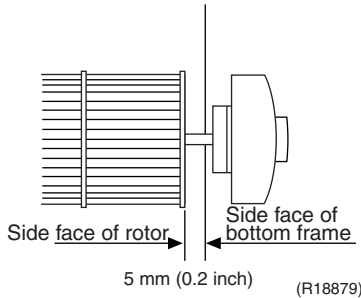
Warning

♦ 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 then the right side plate.	
2	Loosen the screw of the fan rotor.	
3	Remove the fan rotor from the left groove.	
4	Remove the fan motor.	



■ 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.



- (1) Insert the fan motor allowing for approx. 5 mm (0.2 inch) of play.
- (2) Tighten the fan rotor screw until it stops. Then give the screw one more turn.
- (3) If the fan rotor rotates appropriately, tighten the screw completely.
- (4) If not, repeat the procedure from (1).

Revision History

Month / Year	Version	Revised contents
04 / 2014	Si041403E	First edition
11 / 2015	Si041403EA	Model addition: FTKM50/60/71QRV16, FTKP50/60/71QRV16
06 / 2016	Si041403EB	Model addition: ATKM50/60QRV16, ATKM50/60RRV16, ATP50/60/71QRV16, ATP50/60/71RRV16, DTKM50/60QRV16, DTKM50/60RRV16, DTKP50/60/71QRV16, DTKP50/60/71RRV16, FTHP50RRV16, FTKM50/60RRV16, FTKP50/60/71RRV16

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

DAIKIN INDUSTRIES, LTD.

Head Office:
Umeda Center Bldg., 2-4-12, Nakazaki-Nishi,
Kita-ku, Osaka, 530-8323 Japan

Tokyo Office:
JR Shinagawa East Bldg., 2-18-1, Konan,
Minato-ku, Tokyo, 108-0075 Japan

<http://www.daikin.com/products/ac/>

©All rights reserved