

# REMOVAL PROCEDURE



SERVICE  
MANUAL

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

## 5.0/6.0 kW Class



Indoor Unit



Inverter / Non-Inverter



Wall Mounted Type



# Service Manual

# Removal Procedure

## Indoor Unit

### ●Cooling Only

ATC50QRV16	FTE50NRV16
ATC60QRV16	FTE60NRV16
ATC50RRV161	
ATC50RRV162	FTEL50NRV16
ATC60RRV162	FTEL60NRV16
ATQ50QRV16	FTF50PRV16
ATQ60QRV16	FTF60PRV16
ATQ50RRV162	
ATQ60RRV162	FTQ50PRV16
	FTQ60PRV16
DTC50QRV16	
DTC60QRV16	FTQ50QRV16
DTC50RRV161	FTQ60QRV16
DTC50RRV162	FTQ50QRV1625
DTC60RRV162	FTQ60QRV1625
	FTQ50RRV162
DTQ50QRV16	FTQ60RRV162
DTQ60QRV16	FTQ50RRV1625
DTQ50RRV162	FTQ60RRV1625
DTQ60RRV162	
FTC50PRV16	FTKC50NRV16
FTC60PRV16	
	FTKV50NRV16
	FTKV60NRV16
FTC50QRV16	
FTC60QRV16	
FTC50QRV161	
FTC60QRV161	
FTC50QRV1615	
FTC60QRV1615	
FTC50RRV161	
FTC50RRV1615	
FTC50RRV162	
FTC60RRV162	
FTC60RRV1625	

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

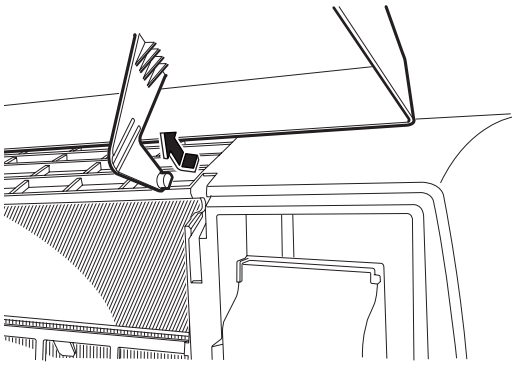
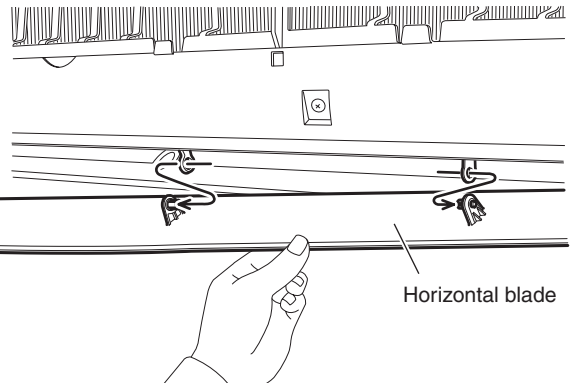
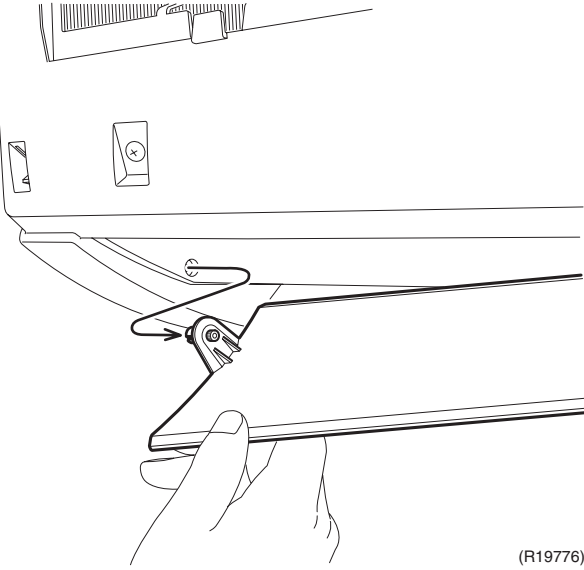
# 1. Air Filters / Front Panel / Horizontal Blade / Vertical Blade ASSYs

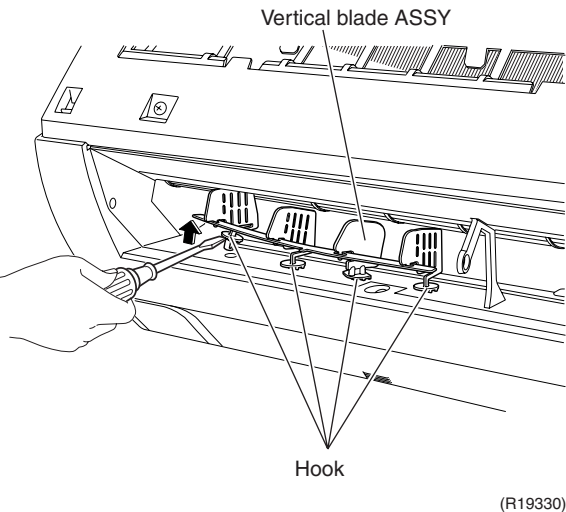
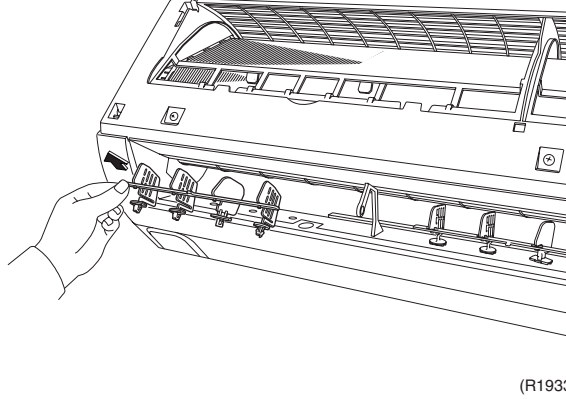


**Warning**

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

Step	Procedure	Points
<p>1. Remove the air filters.</p> <p>1 Open the front panel to the position where it stops.</p> <p>2 Unfasten the 2 hooks and remove the air filter.</p> <p>3 Remove the optional filter from the back of the air filter, if any.</p>	<p>Hook</p> <p>Front panel</p> <p>Air filter</p> <p>(R19771)</p> <p>Optional filter</p> <p>Hook</p> <p>Air filter</p> <p>(R23395)</p>	<ul style="list-style-type: none"> <li>■ The 2 filters are interchangeable.</li> <li>■ Insert the air filter with the "FRONT" mark faced up.</li> <li>■ When reassembling, insert the air filter along the guides.</li> <li>■ Be sure to insert the 2 hooks when reassembling the air filter.</li> </ul>
<p>2. Remove the front panel.</p> <p>1 Open the front panel over the position where it stops.</p> <p>2 Push the left shaft to the right and release the left shaft.</p>	<p>(R19772)</p> <p>(R19773)</p>	<ul style="list-style-type: none"> <li>■ When reassembling the front panel, fit the right and left shafts one by one into the grooves and fully push them into position.</li> </ul>

Step	Procedure	Points
3	Remove the right shaft in the same way.	
4	Remove the front panel.	
 <p>(R19774)</p>		
3. Remove the horizontal blade.		
1	Release the 2 center shafts of the horizontal blade.	
2	Release the left shaft.	
 <p>Horizontal blade</p> <p>(R19775)</p>  <p>(R19776)</p>		

Step	Procedure	Points
3	Release the right shaft.	<ul style="list-style-type: none"> <li>■ Reassembling procedure</li> </ul>
4	Remove the horizontal blade.	<ol style="list-style-type: none"> <li>1. Fit the horizontal blade to the right shaft first. Make sure to rotate the horizontal blade so the shaft fits correctly.</li> <li>2. Fit the horizontal blade to the center and left shafts.</li> </ol>
4. Remove the vertical blade ASSYs.		
1	Unfasten the 4 hooks of the vertical blade ASSY with a flat screwdriver.	 <p style="text-align: center;">Vertical blade ASSY</p> <p style="text-align: center;">Hook</p> <p style="text-align: right;">(R19330)</p>
2	Remove the vertical blade ASSY.	 <p style="text-align: right;">(R19331)</p>
3	Remove the other 2 vertical blade ASSYs likewise.	

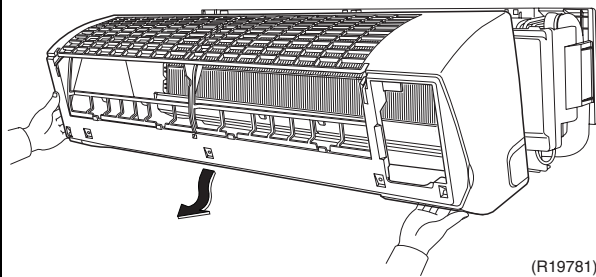
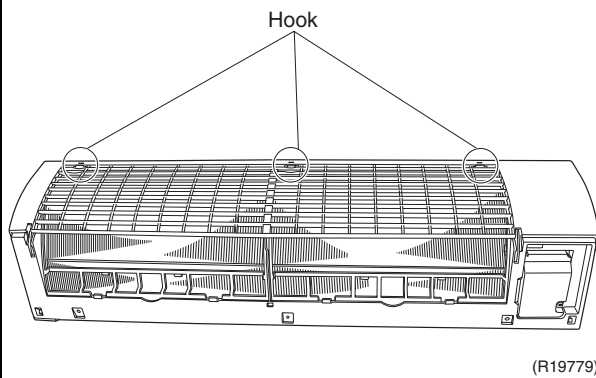
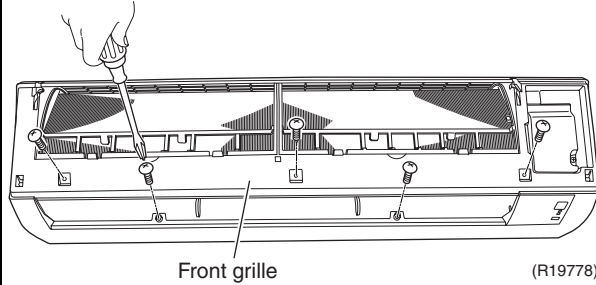
## 2. Front Grille



### 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.	
2	Unfasten the 3 hooks on the top of the front grille.	<ul style="list-style-type: none"> <li>■ The convex marks (...) on the front grille indicate the position of the hooks.</li> </ul>
3	Remove the front grille.	<ul style="list-style-type: none"> <li>■ When reassembling, make sure all the 3 hooks are fastened.</li> </ul>

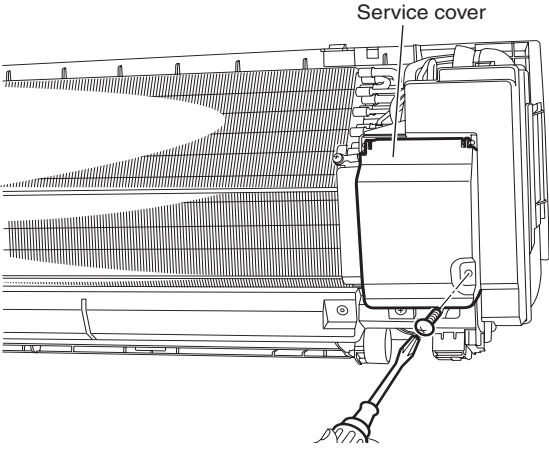
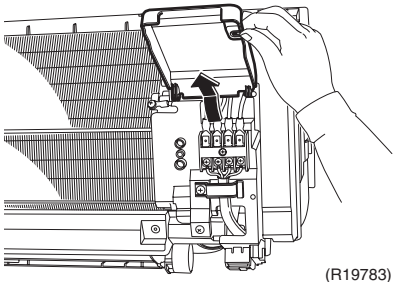
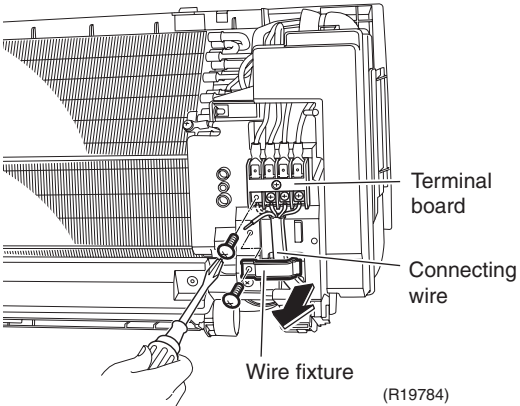
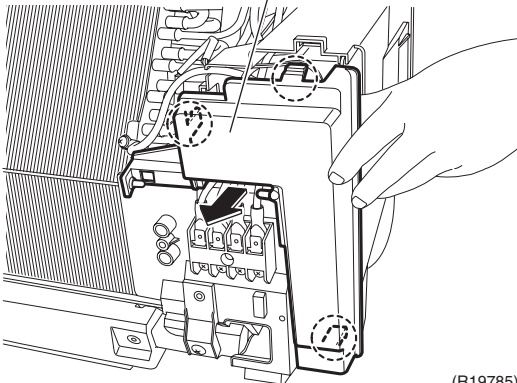


### 3. Electrical Box

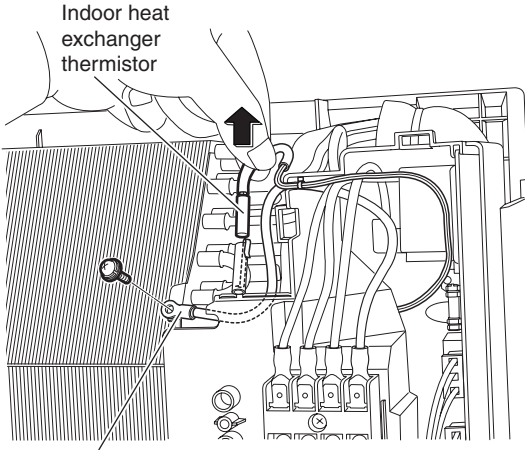
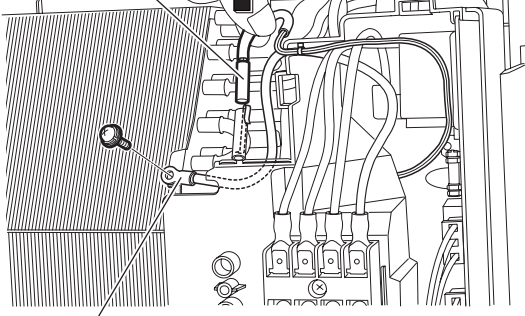
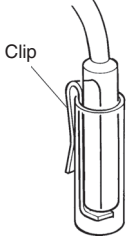
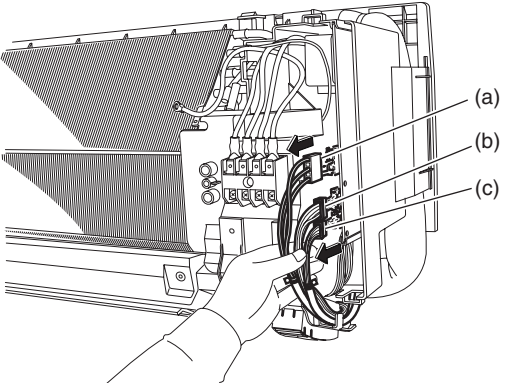
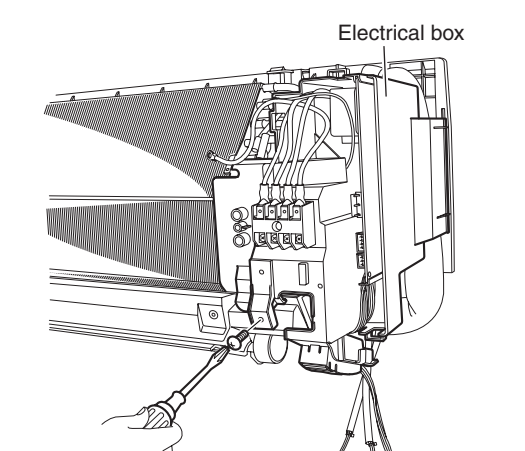
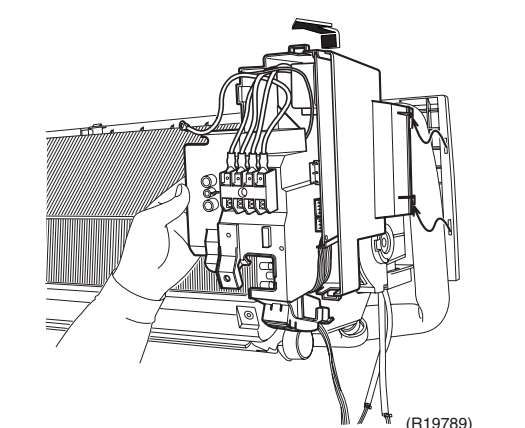


**Warning**

- ◆ 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 style="text-align: center;">Service cover</p> <p style="text-align: right;">(R19782)</p>  <p style="text-align: right;">(R19783)</p>	
2	Remove the 4 screws on the terminal board and disconnect the connecting wire.	 <p style="text-align: right;">Terminal board Connecting wire Wire fixture</p> <p style="text-align: right;">(R19784)</p>	
4	Unfasten the 3 hooks and remove the electrical box cover.	 <p style="text-align: center;">Electrical box cover</p> <p style="text-align: right;">(R19785)</p>	



Step	Procedure	Procedure	Points
5	Remove the screw and release the earth/ground wire.	 <p>Indoor heat exchanger thermistor</p> <p>Earth/ground wire</p> <p>(R19786)</p>	<ul style="list-style-type: none"> <li>■ The position of the indoor heat exchanger thermistor varies depending on the model.</li> </ul>
6	Pull out the indoor heat exchanger thermistor.	 <p>(R11268)</p>	<ul style="list-style-type: none"> <li>■ Be careful not to lose the clip of the thermistor.</li> </ul>  <p>Clip</p> <p>(R11268)</p>
7	Disconnect the 3 connectors.	 <p>(a)</p> <p>(b)</p> <p>(c)</p> <p>(R19787)</p>	<ul style="list-style-type: none"> <li>(a) fan motor: [CN_FAN] or [S1]</li> <li>(b) swing motor: [CN_STP] or [S6]</li> <li>(c) fan motor (Hall IC): [CN101] or [S7]</li> </ul>
8	Remove the screw of the electrical box.	 <p>Electrical box</p> <p>(R19788)</p>	
9	Lift up the electrical box from the bottom frame and remove the electrical box.	 <p>(R19789)</p>	

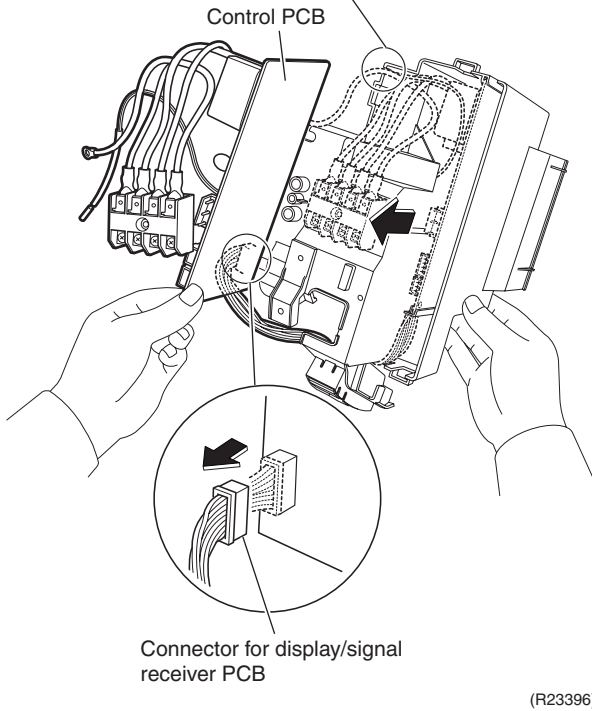
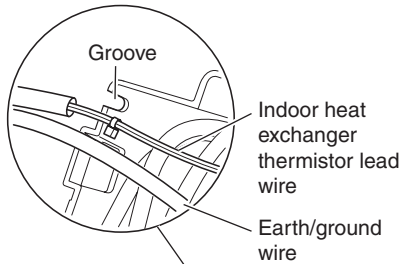
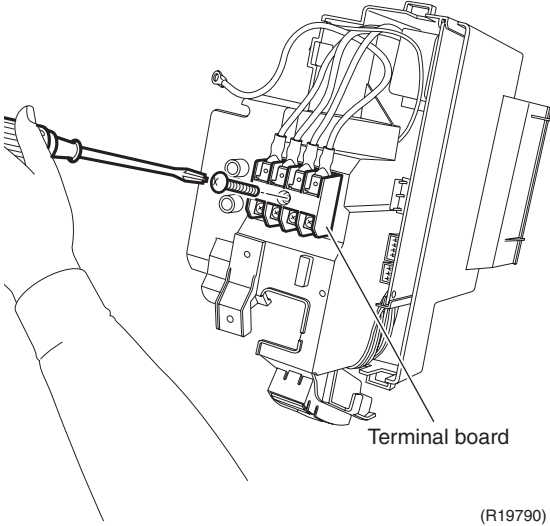
# 4. PCBs / Swing Motor



**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 control PCB.	
1	Remove the screw of the terminal board.	
2	Release the earth/ground wire and the indoor heat exchanger thermistor lead wire from the groove.	
3	Pull out the control PCB from the electrical box.	
4	Disconnect the connector for the display/signal receiver PCB ([CN_DB] or [S26]).	
5	Remove the control PCB.	



Step	Procedure	Points
<p>2. Remove the display/signal receiver PCB.</p>		
<p>1 Unfasten the 2 hooks and remove the display/signal receiver PCB ASSY.</p> <p>2 Unfasten the 3 hooks.</p> <p>3 Disconnect the connector for the control PCB ([CN_MB] or [S27]).</p> <p>4 Remove the display/signal receiver PCB.</p>	<p>Hook</p> <p>Display/signal receiver PCB ASSY</p> <p>Hook</p> <p>(R23397)</p> <p>Display/signal receiver PCB</p> <p>Connector for control PCB</p> <p>(R23398)</p>	<p>(R19794)</p>
<p>3. Remove the swing motor.</p>	<p>1 Remove the screw, and then the swing motor.</p> <p>Swing motor</p> <p>(R19795)</p>	

# 5. Indoor Heat Exchanger



**Warning**

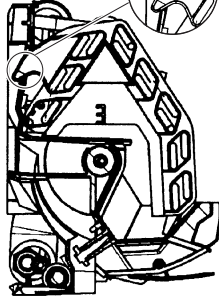
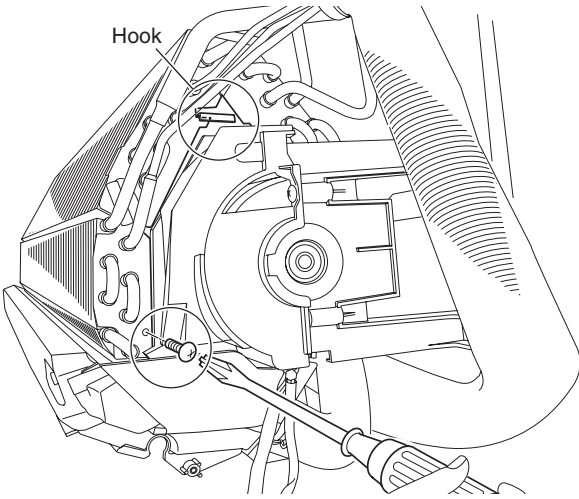
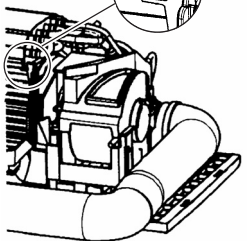
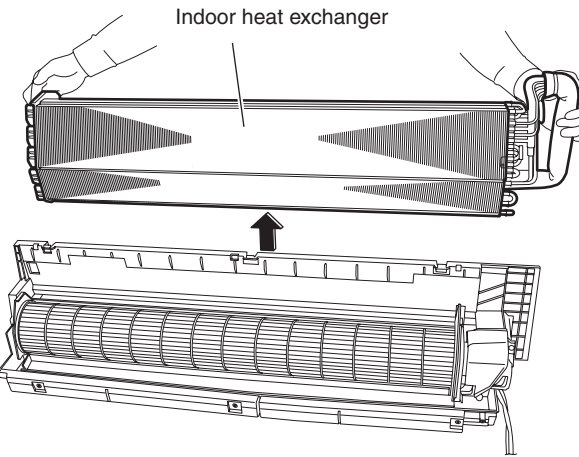
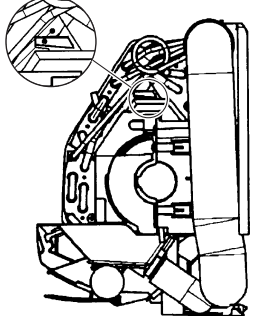
- ◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.
- ◆ In pump-down work, be sure to stop the compressor before disconnecting the refrigerant pipe. If the refrigerant pipe is disconnected with the compressor operating and the stop valve open, air 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	Procedure	Points
<p>1 Pull out the drain hose.</p> <p>2 Unscrew the flare nuts for gas piping and liquid piping.</p>		<p>Liquid piping</p> <p>Gas piping</p> <p>Drain hose</p> <p>(R19796)</p>	<ul style="list-style-type: none"> <li>■ Removal procedure is easier if a wooden base is used to incline the indoor unit.</li> <li>■ Place a plastic sheet around the drain pan to prevent wetting the floor with remaining drain.</li> <li>■ If the drain hose is embedded in the wall, disconnect beforehand.</li> <li>■ Carry out the removal works with 2 wrenches.</li> </ul>
<p>3 Remove the 2 screws.</p> <p>4 Detach the indoor unit from the installation plate.</p>		<p>(R19797)</p>	<ul style="list-style-type: none"> <li>■ When the pipings are disconnected, protect the openings of both the pipe and the unit from moisture intrusion.</li> </ul>
<p>5 Slightly bend the auxiliary piping.</p>		<p>Auxiliary piping</p> <p>(R19798)</p>	

Step	Procedure	Points
6	Remove the screw on the left side.	<ul style="list-style-type: none"> <li>■ When reassembling, fasten the 3 hooks of the indoor heat exchanger.</li> </ul>
7	Remove the screw on the right side.	(1) Insert the protrusion into the gap of the bottom frame.
8	Unfasten the hook on the right side.	 <p>Left side (R19768)</p>
9	Lift up and remove the indoor heat exchanger.	(2) Fit the heat exchanger plate into the slit of the bottom frame.
	 <p>Hook</p> <p>(R20349)</p>	 <p>Right side (R19769)</p>
	 <p>Indoor heat exchanger</p> <p>(R19800)</p>	(3) Fit the slit of the heat exchanger plate into the bottom frame.
		 <p>Right side (R19770)</p>

# 6. Fan Motor / Fan Rotor

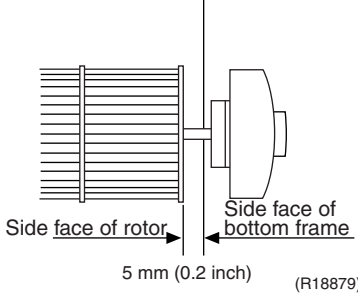
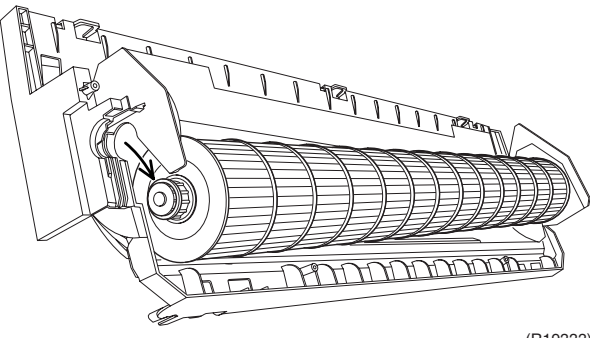
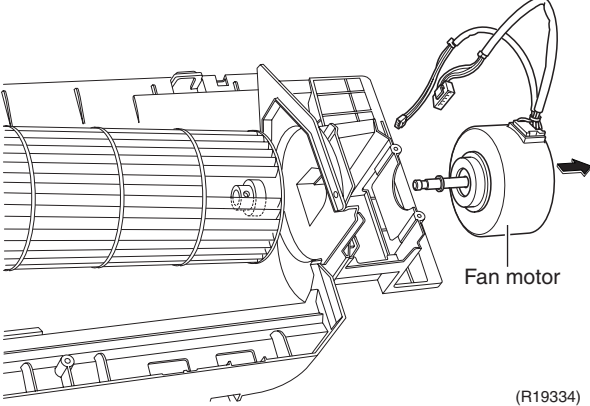
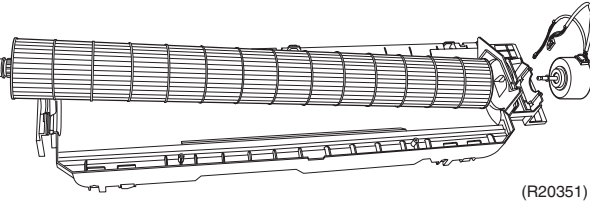


**Warning**

♦ 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 then the right side plate.	
	<p style="text-align: right;">Right side plate</p> <p style="text-align: right;">(R19801)</p>	
2	Remove the screw of the fan rotor.	
	<p style="text-align: center;">Fan rotor</p> <p style="text-align: right;">(R19802)</p>	



Step	Procedure	Points
3	Unfasten the hook and remove the bottom frame ASSY.	<ul style="list-style-type: none"> <li>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.</li> </ul>
4	Release the fan rotor from the left groove.	 <p>Side face of rotor</p> <p>Side face of bottom frame</p> <p>5 mm (0.2 inch)</p> <p>(R18879)</p>
5	Remove the fan motor.	 <p>(R19333)</p>  <p>Fan motor</p> <p>(R19334)</p>  <p>(R20351)</p> <ol style="list-style-type: none"> <li>Insert the fan motor allowing for approx. 5 mm (0.2 inch) of play.</li> <li>Tighten the fan rotor screw until it stops. Then give the screw one more turn.</li> <li>If the fan rotor rotates appropriately, tighten the screw completely.</li> <li>If not, repeat the procedure from (1).</li> </ol>

# Revision History

Month / Year	Version	Revised contents
03 / 2014	Si041257E	First edition
10 / 2014	Si041257EA	Model addition: FTF50/60PRV16
10 / 2015	Si041257EB	Model addition: ATC50/60QRV16, ATQ50/60QRV16, DTC50/60QRV16, DTQ50/60QRV16, FTC50/60QRV16, FTC50/60QRV161, FTQ50/60QRV16
05 / 2016	Si041257EC	Model addition: ATC50RRV161, ATC50/60RRV162, ATQ50/60RRV162, DTC50RRV161, DTC50/60RRV162, DTQ50/60RRV162, FTC50/60QRV1615, FTC50RRV161, FTC50RRV1615, FTC50/60RRV162, FTC60RRV1625, FTQ50/60QRV1625, FTQ50/60RRV162, FTQ50/60RRV1625



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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