



SERVICE MANUAL

2.8/4.2/5.0 kW Class



Inverter

Pair Type



Service Manual Removal Procedure

Outdoor Unit

●Heat Pump RXR28EV1B9 RXR42EV1B9 RXR50EV1B9

RXR28FVLT RXR50FVLT

Table of Contents

1.	Removal of Humidifier Unit	2
2.	Removal of Heater Assembly /	
	Humidifying Rotor / Humidifying Rotor Motor	5
3.	Removal of Humidifying Fan Assembly	9
4.	Removal of Hygroscopic Fan Motor	12
	Removal of Outdoor Fan / Fan Motor	
6.	Removal of Humidifying Duct	17
7.	Removal of Electrical Box	18
8.	Removal of PCB	22
9.	Removal of Sound Blankets	25
10).Removal of Thermistor Assembly	27
11	Removal of Reactor / Partition Plate	29
12	P.Removal of Four Way Valve	30
13	B.Removal of Electronic Expansion Valve	32
	I.Removal of Compressor	

Not

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

Removal Procedure

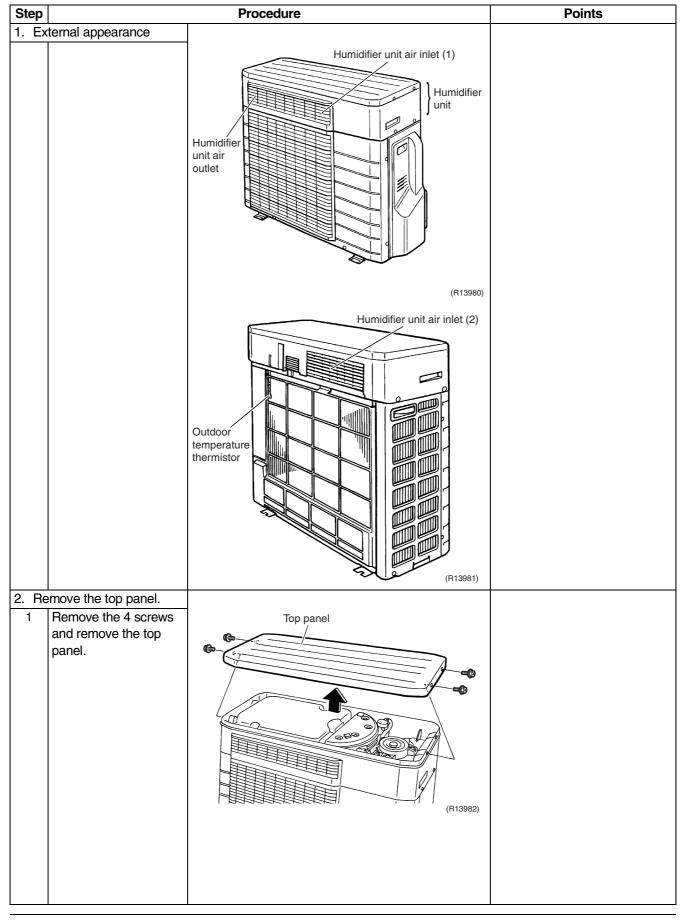
1

Removal of Humidifier Unit Si00-777

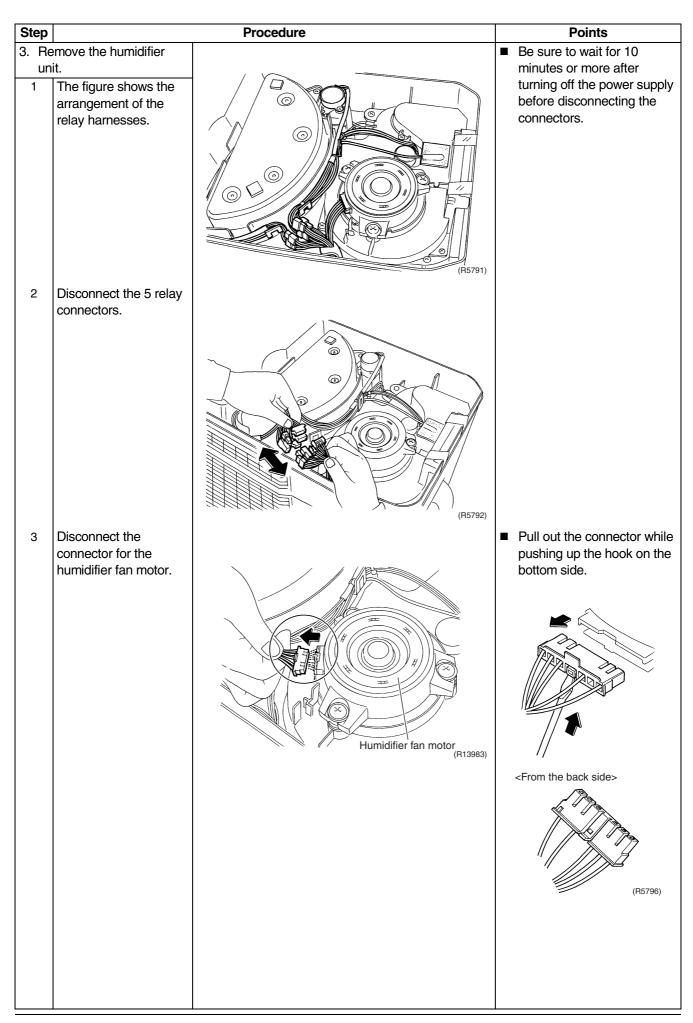
1. Removal of Humidifier Unit

Procedure

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

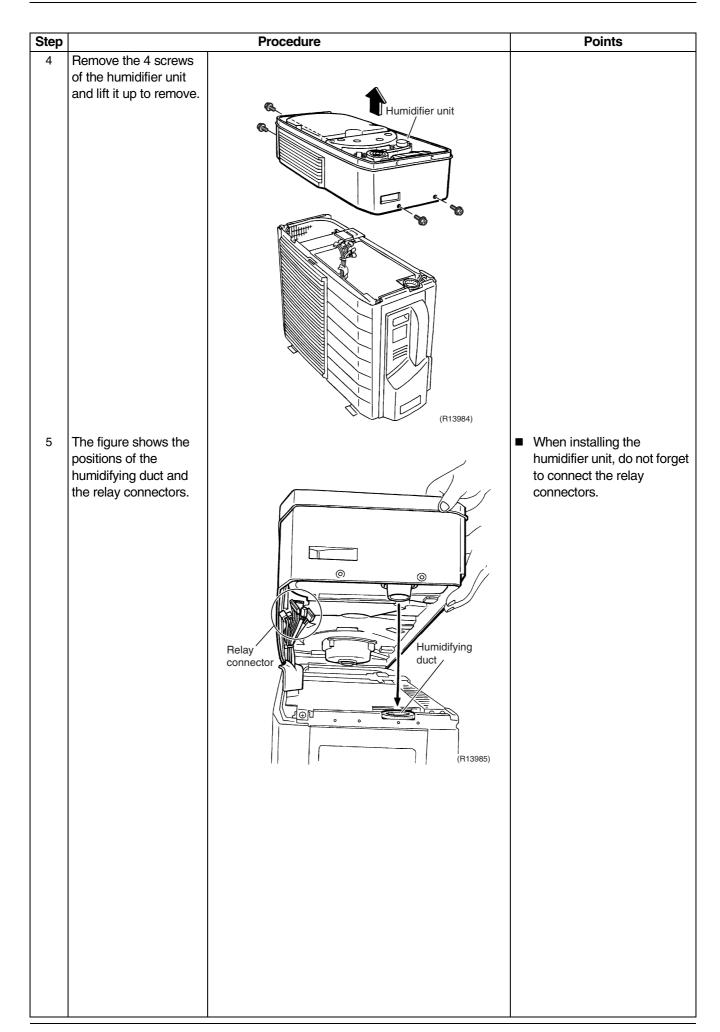


Removal of Humidifier Unit



Si00-777

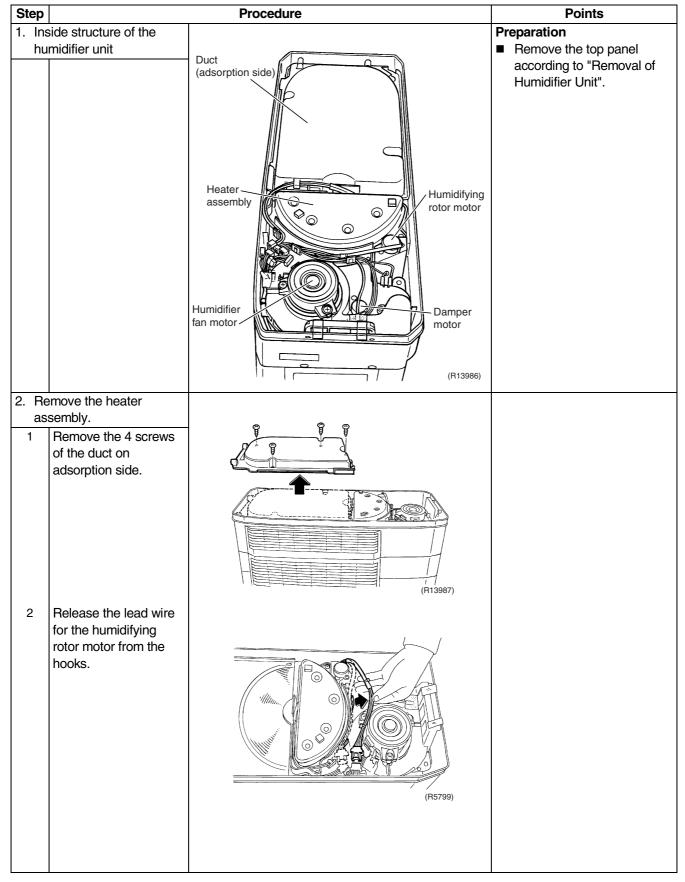
Removal of Humidifier Unit Si00-777



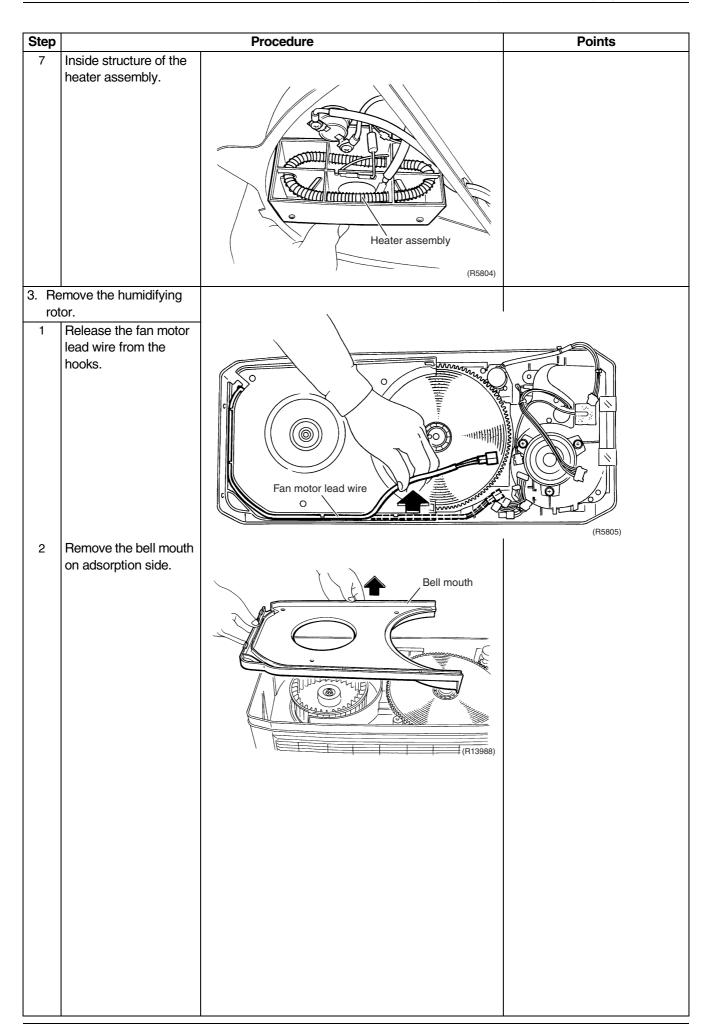
2. Removal of Heater Assembly / Humidifying Rotor / Humidifying Rotor Motor

Procedure

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



Step		Procedure	Points
3	Remove the 2 screws and remove the heater assembly.	(R5800)	■ The heater assembly should be replaced as an assembly set. (Disassembling of the assembly may cause malfunction.)
4	Unfasten the hook.	Hook	
5	Inside of the heater assembly.	Heater Thermal fuse	Heater and thermal fuse should be replaced as the heater assembly.
6	Loosen the 4 screws of the thermal protector.	Thermal protector (R5803)	■ The thermal protector is removable. Remove it before the lead wire.

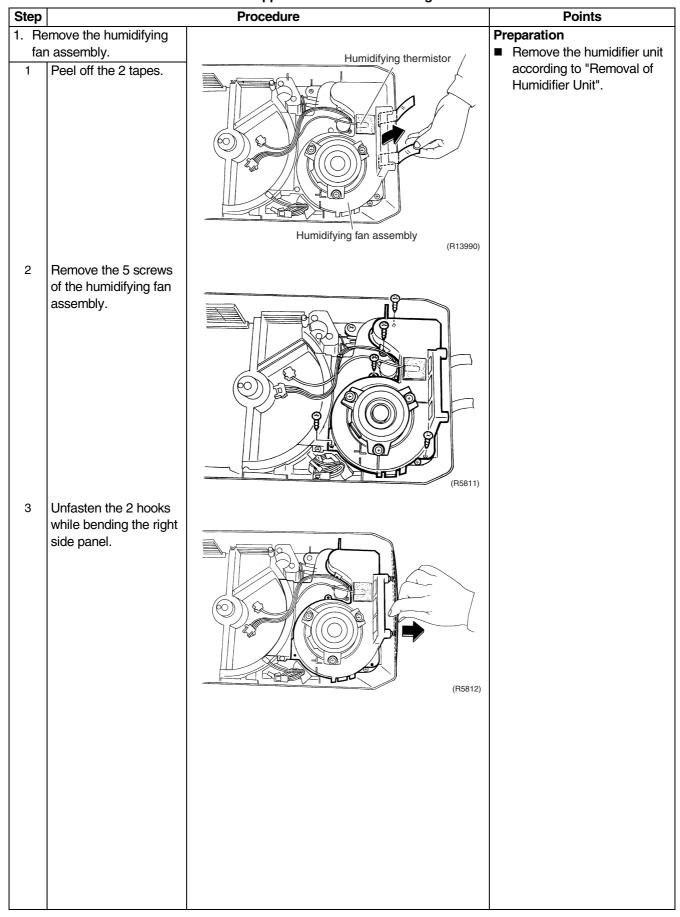


Step		Procedure	Points
3	Lift the humidifying rotor up to remove.	Humidifying rotor (Moisture adsorption element) (R13989)	■ A heat catalyst (black) is applied on the upper side.
	emove the humidifying or motor.	,	
1	The figure shows the connector for the humidifying rotor motor.	(R5808)	
2	Remove the 2 screws and remove the humidifying rotor motor.	Humidifying rotor motor Rotor driving part (R5809)	

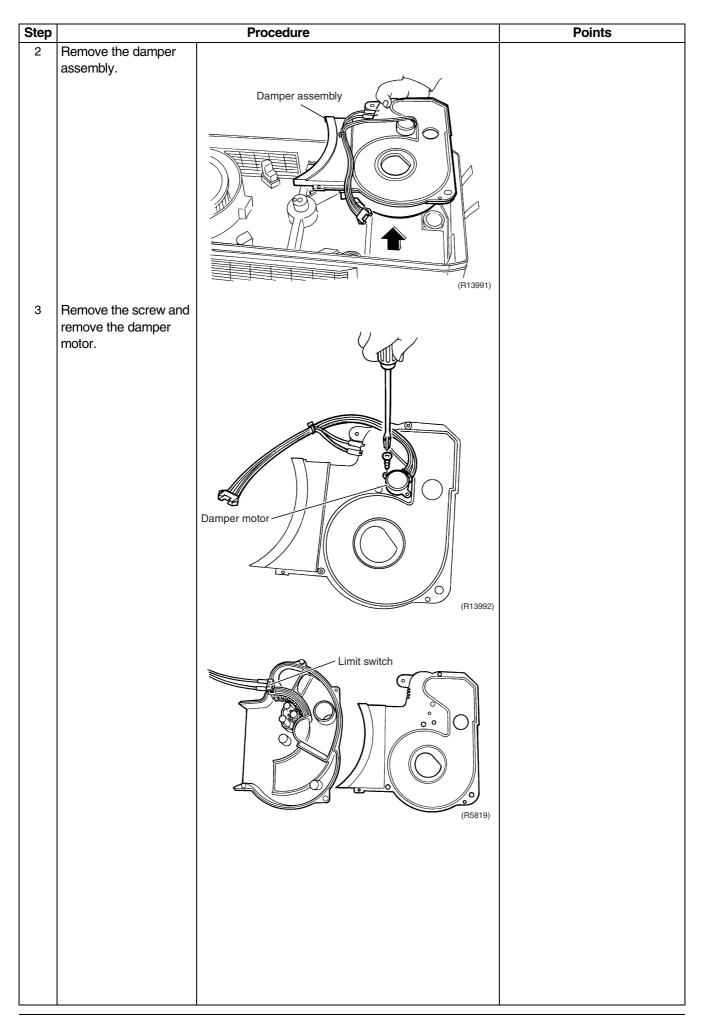
3. Removal of Humidifying Fan Assembly

Procedure

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



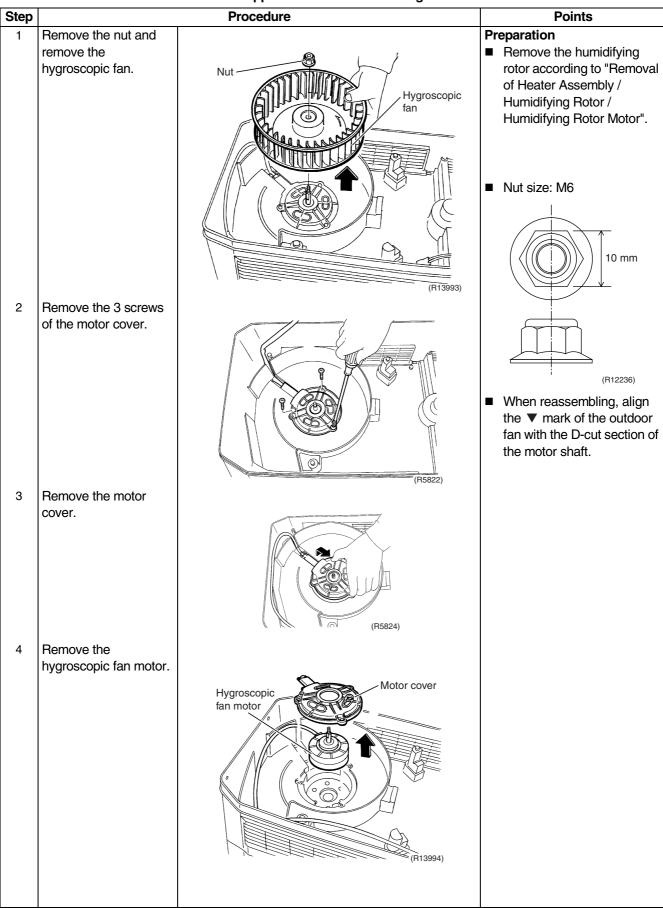
Step		Procedure	Points
4	Remove the humidifying fan assembly.	(R5813)	■ The humidifying fan assembly should be replaced as an assembly set. (Disassembling of the assembly can cause a noise.)
5	Peel the seal material and pull out the humidifying thermistor.	(R5814)	■ Inside of the upper part of the humidifying fan assembly
2. Re	l emove the damper		assembly
as 1	Remove the 3 screws.	(R5816)	



4. Removal of Hygroscopic Fan Motor

Procedure

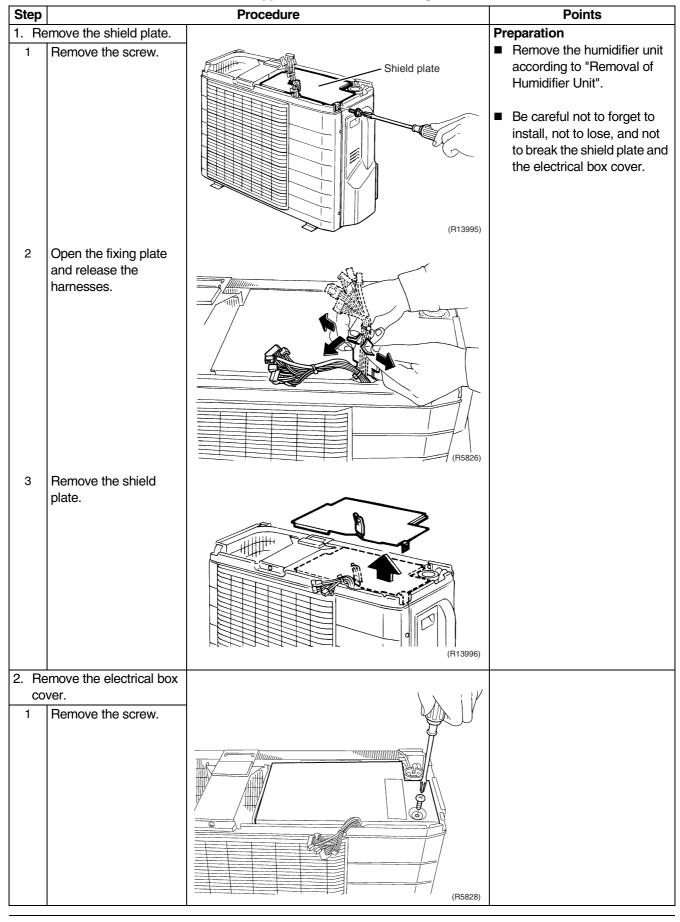
Warning Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

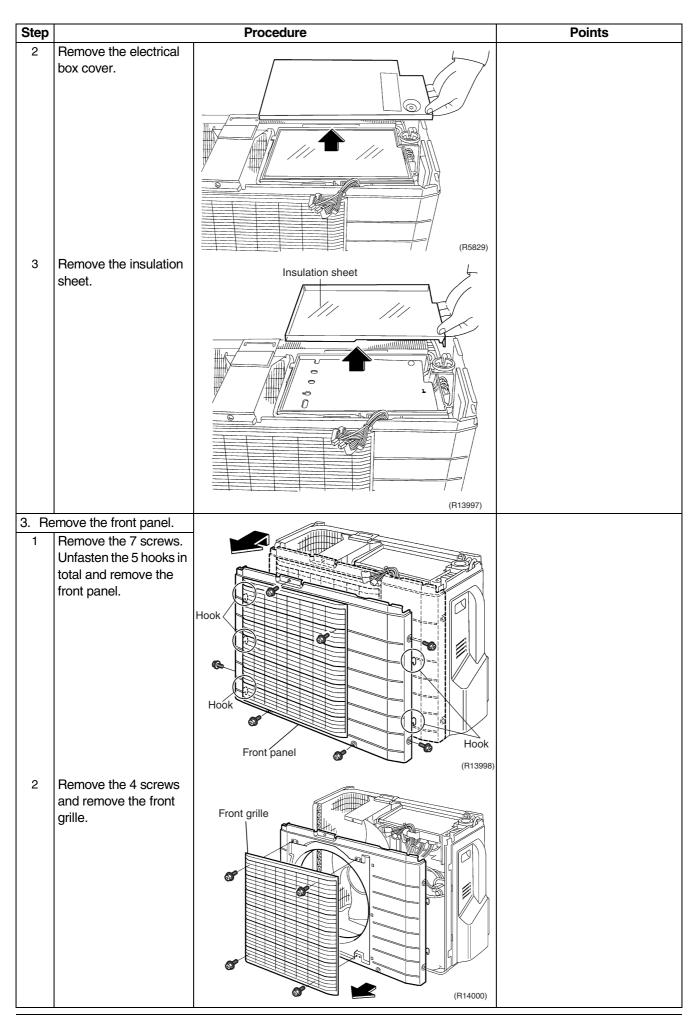


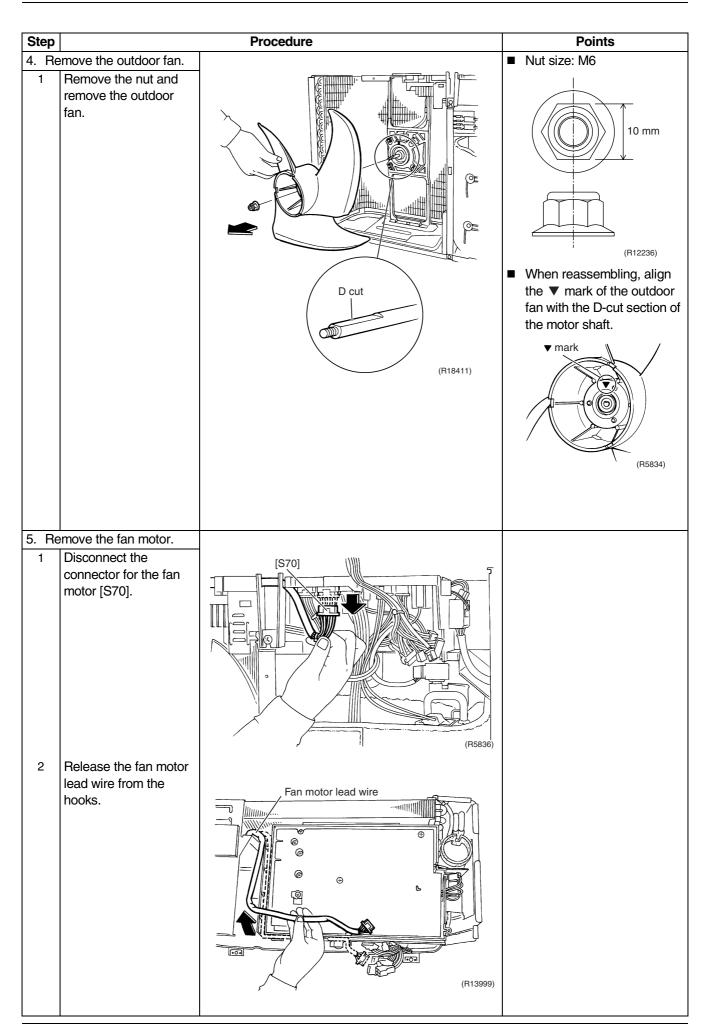
5. Removal of Outdoor Fan / Fan Motor

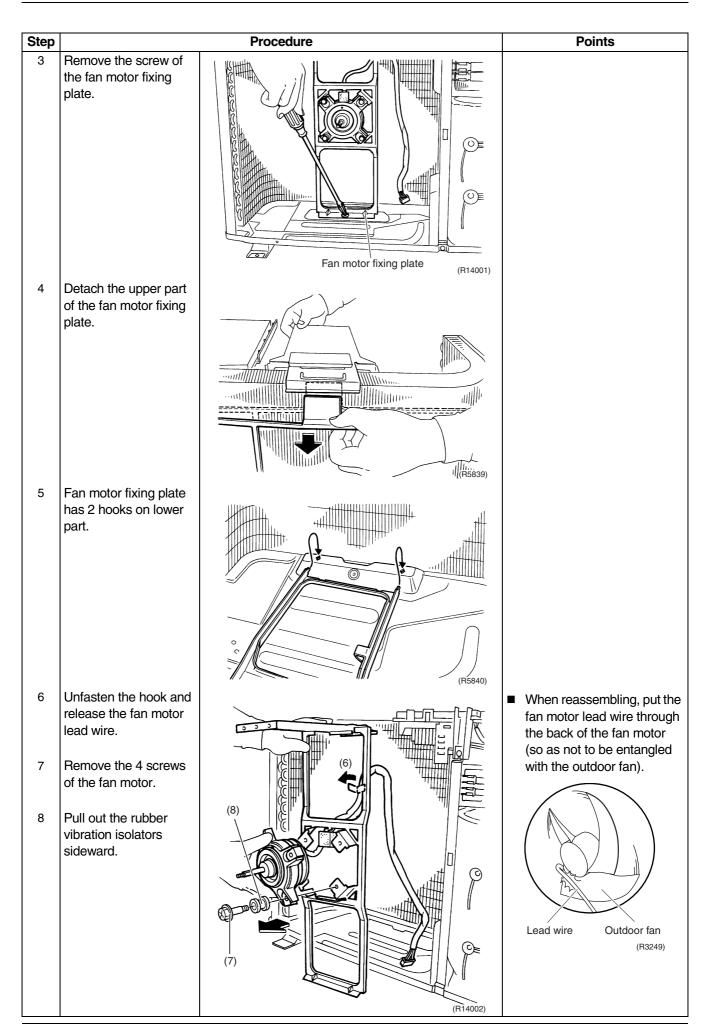
Procedure

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





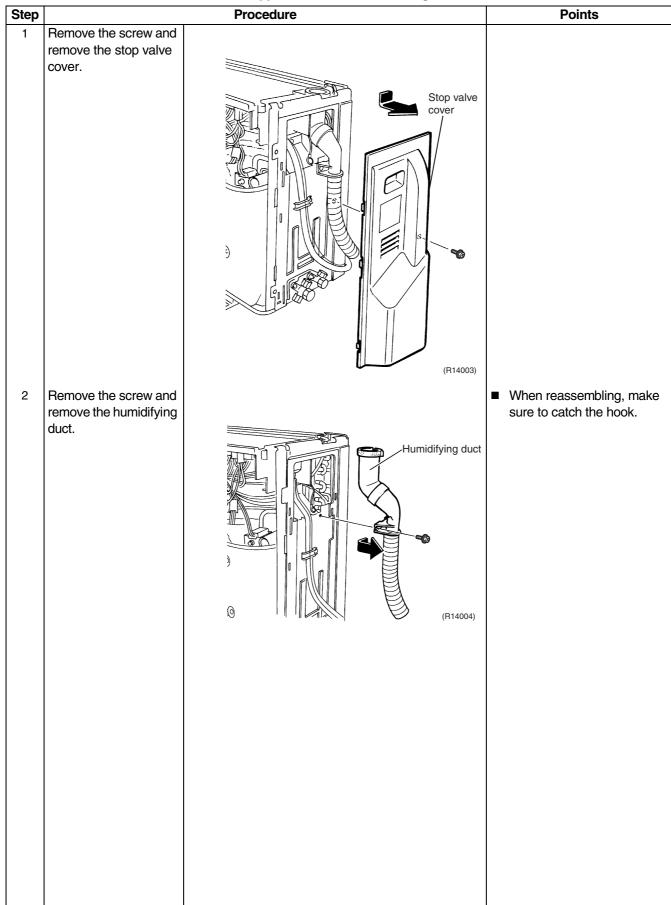




6. Removal of Humidifying Duct

Procedure

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

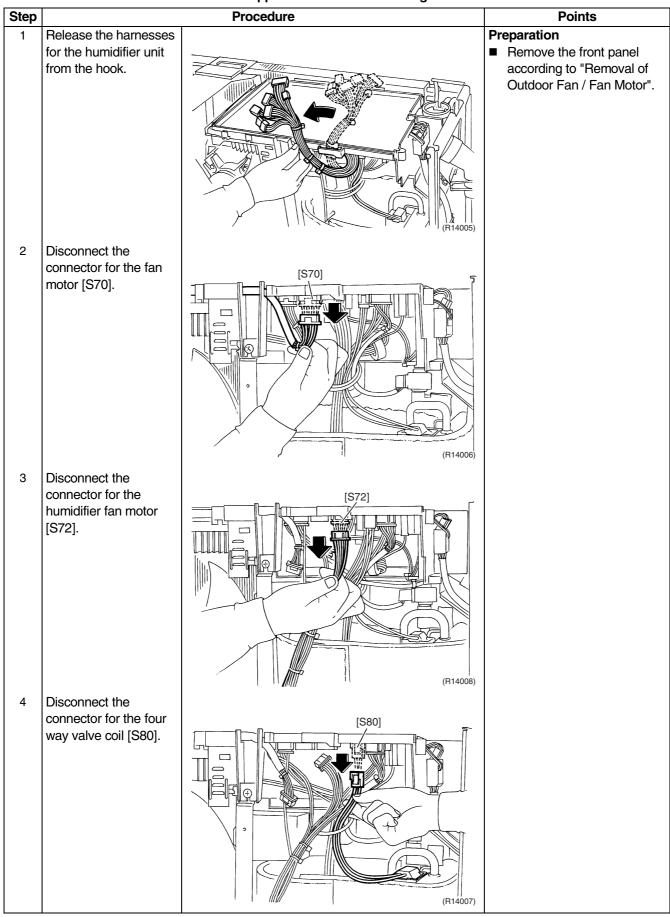


Removal of Electrical Box Si00-777

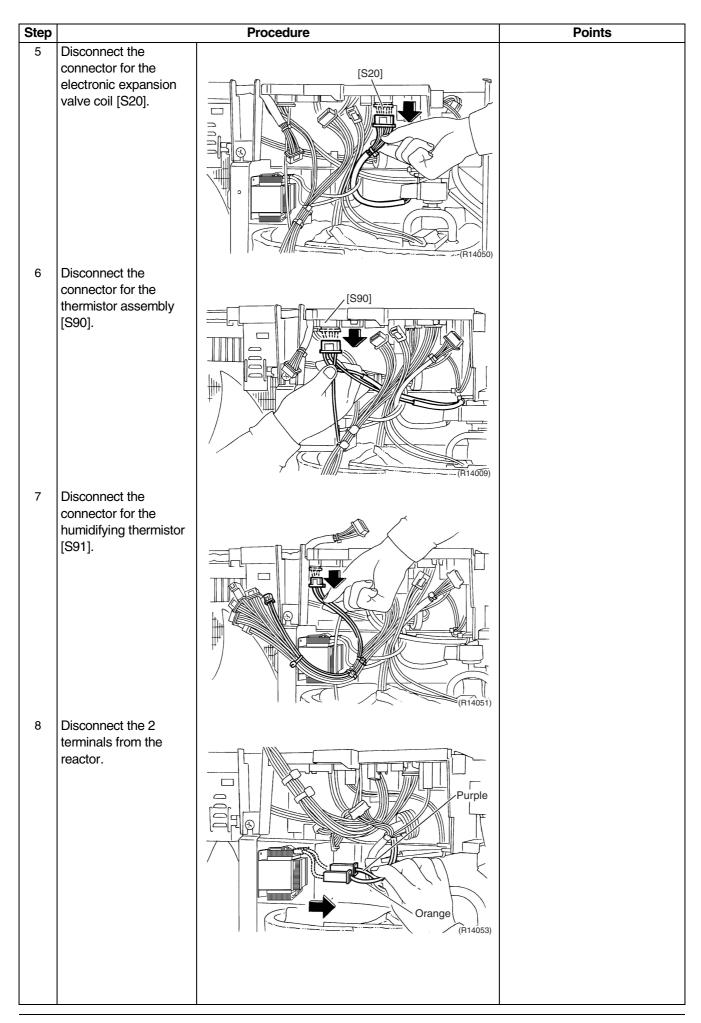
7. Removal of Electrical Box

Procedure

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



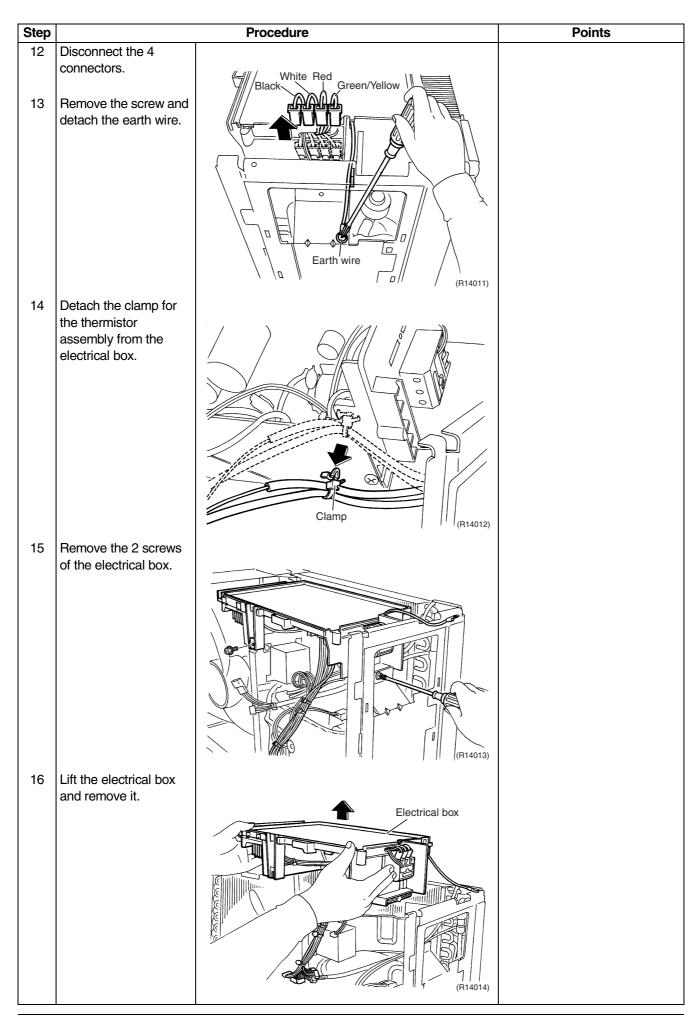
Si00-777 Removal of Electrical Box



Removal of Electrical Box Si00-777

Step		Procedure	Points
9	Disconnect the relay harness for the compressor.	(R14010)	■ Thormal func abouted be
10	Remove the screw of the terminal board.	(R14052)	 Thermal fuse should be replaced with the terminal board. You can work without removing the terminal board.
11	Remove the screws and disconnect the connecting wires and the power supply cables.	(R14054)	

Si00-777 Removal of Electrical Box

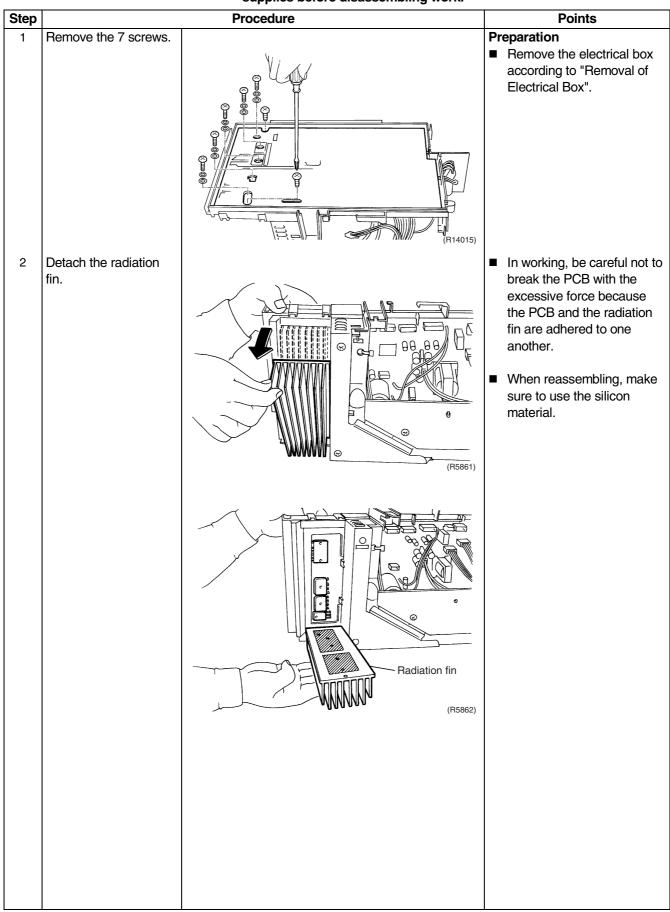


Removal of PCB Si00-777

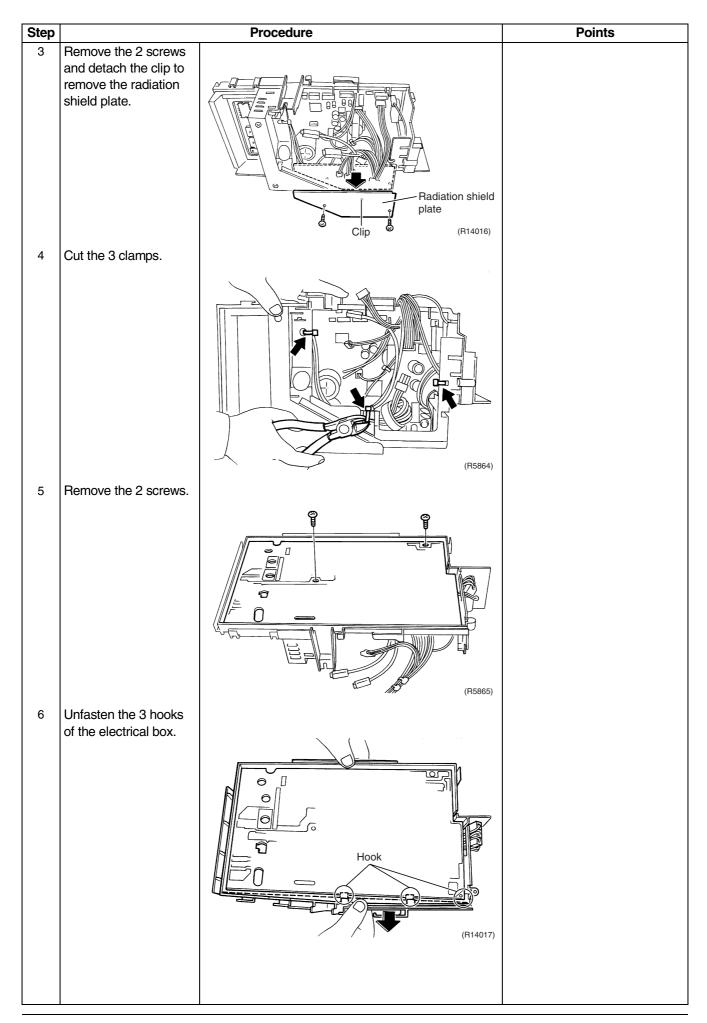
8. Removal of PCB

Procedure

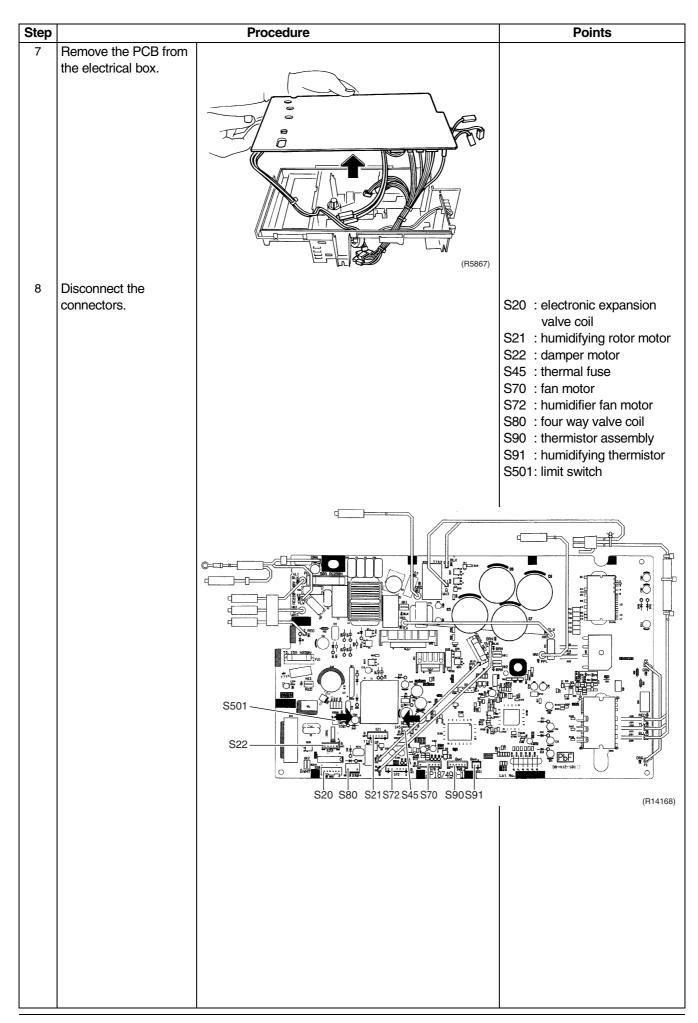
Warning Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.



Si00-777 Removal of PCB



Removal of PCB Si00-777



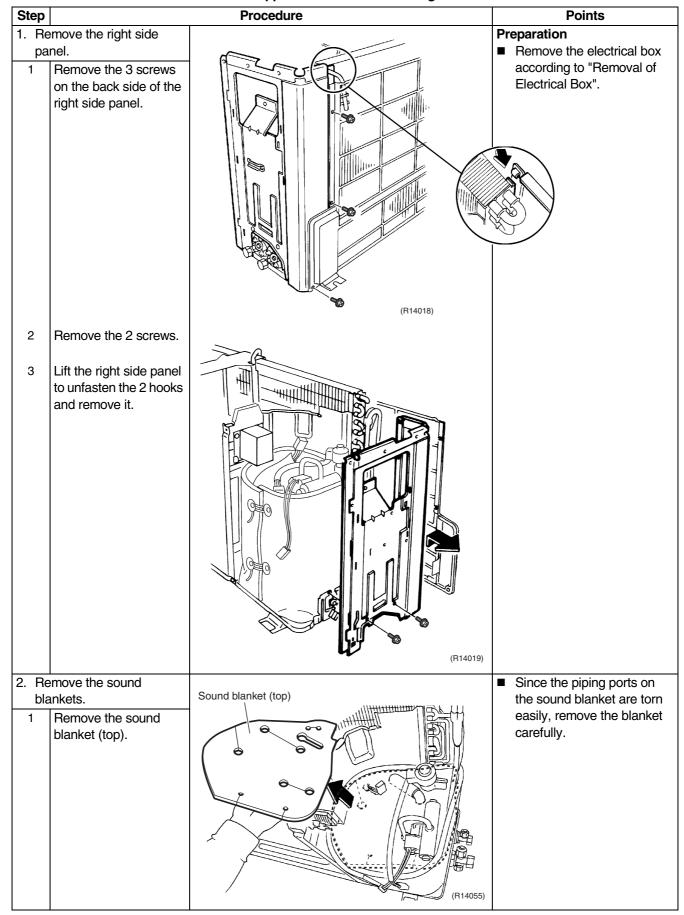
Removal of Sound Blankets

9. Removal of Sound Blankets

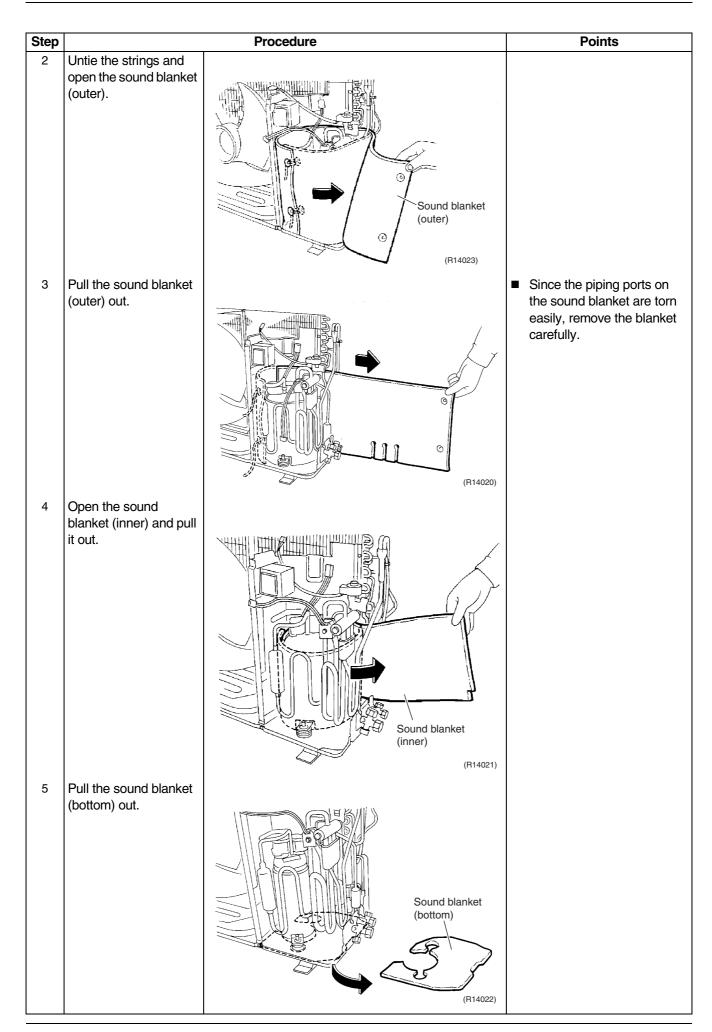
Procedure



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



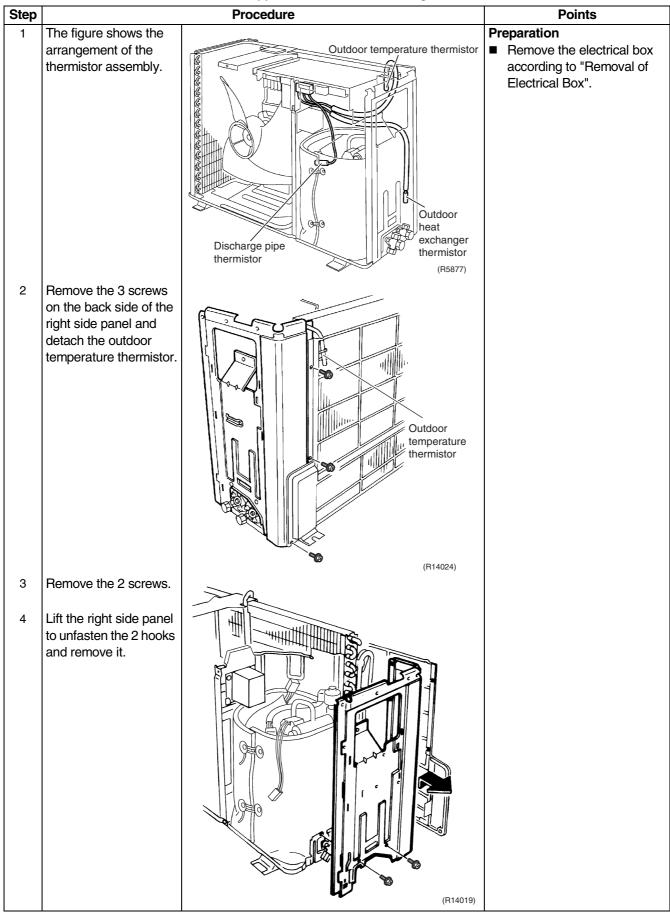
Removal of Sound Blankets Si00-777

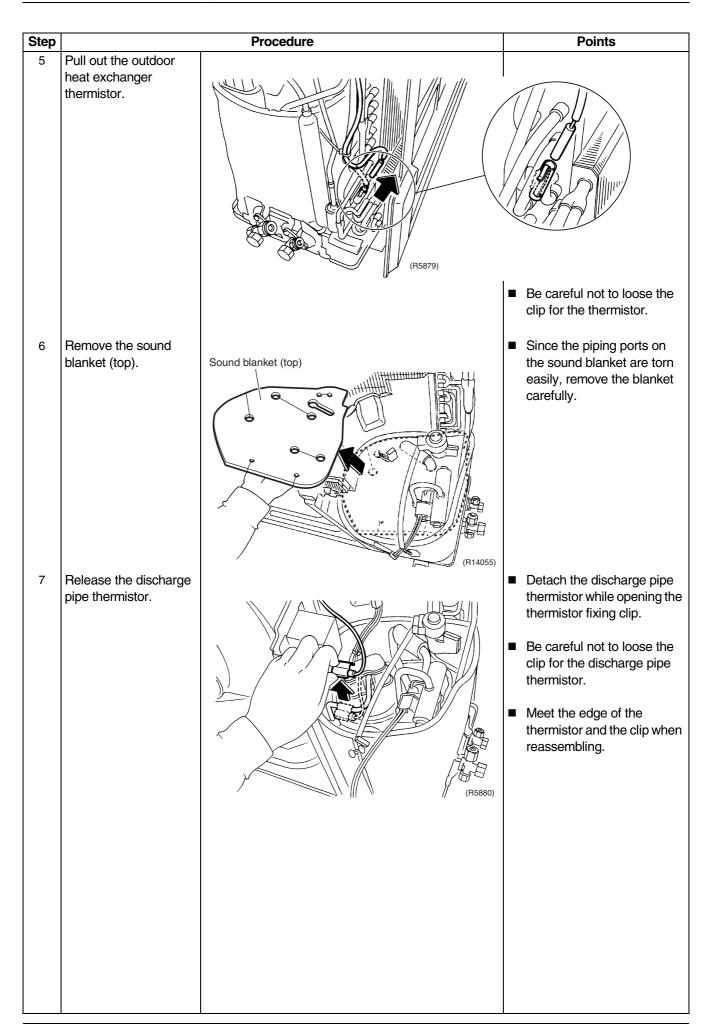


10.Removal of Thermistor Assembly

Procedure

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

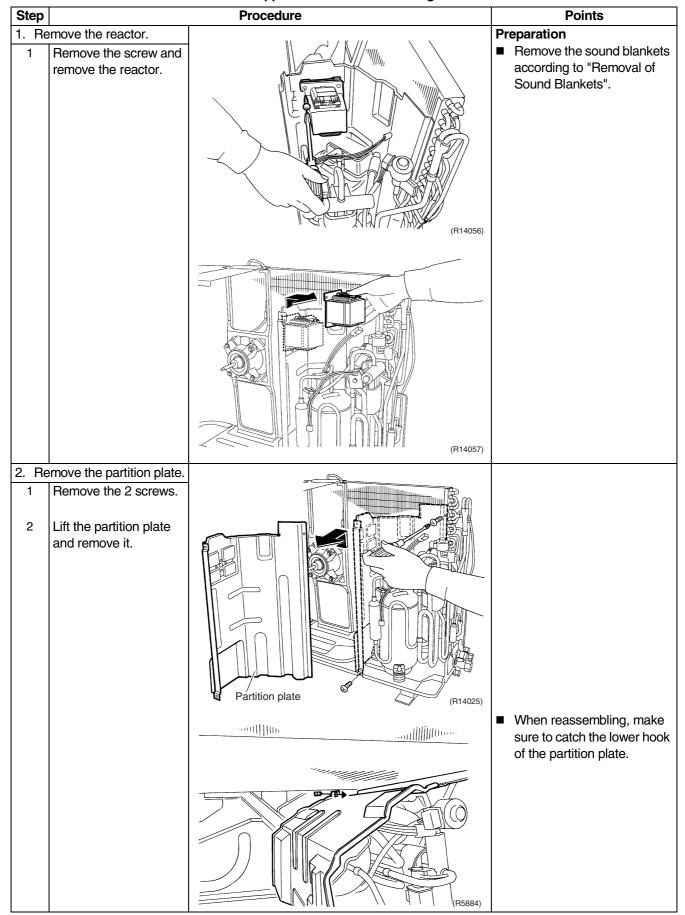




11. Removal of Reactor / Partition Plate

Procedure

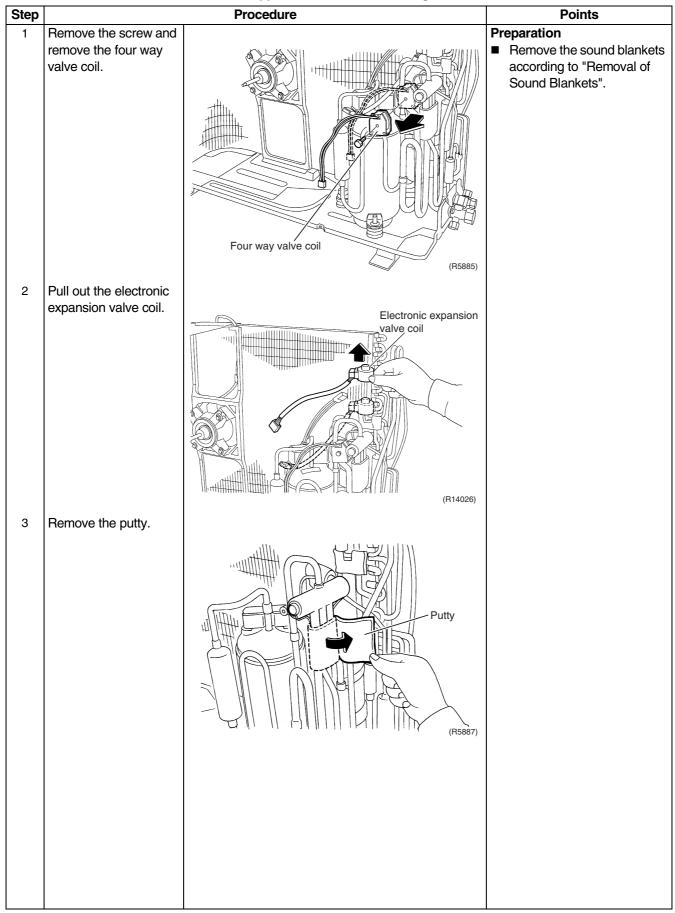
Warning Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.



12. Removal of Four Way Valve

Procedure

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



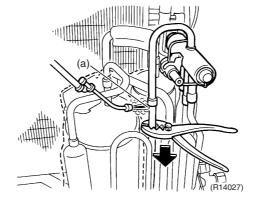
Step

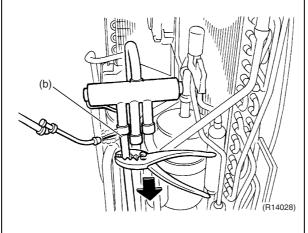
- Before working, make sure that the refrigerant gas is empty in the circuit.
- Be sure to apply nitrogen replacement when heating up the brazed part.
- Heat up the 4 brazed parts of the four way valve. Disconnect them in the order of (a) (b) (c) (d).

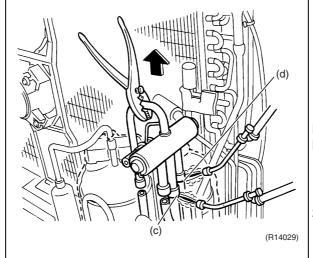
Note:

- Do not use a metal saw for cutting pipes by all means because the sawdust comes into the circuit.
- When withdrawing the pipes, be careful not to pinch them firmly with pliers. The pipes may get deformed.
- Provide a protective sheet or a steel plate so that the brazing flame cannot influence peripheries.

Procedure







Points

Warning
Be careful not to get yourself burnt with the pipes and other parts that are heated by the gas brazing machine.

Warning
If the refrigerant gas leaks
during work, ventilate the
room. (If the refrigerant gas
is exposed to flames, toxic
gas may be generated.)

! Caution

From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.

Cautions for restoration

- 1. Restore the piping by non-oxidation brazing.
- It is required to prevent the carbonization of the oil inside the four way valve and the deterioration of the gaskets affected by heat. (Keep below 120°C.) For the sake of this, wrap the four way valve with wet cloth and provide water so that the cloth does not dry.

In case of difficulty with gas brazing machine

- Disconnect the brazed part where is easy to disconnect and restore.
- Cut pipes on the main unit with a tube cutter in order to make it easy to disconnect.

13. Removal of Electronic Expansion Valve

Procedure

Warning

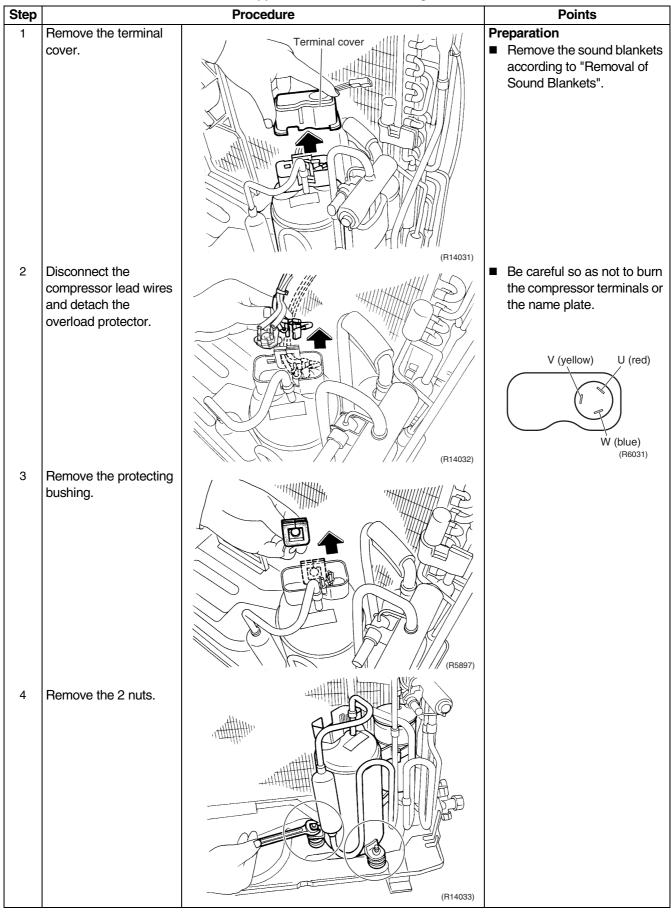
Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step **Procedure Points** Remove the screw and Preparation remove the four way Remove the sound blankets valve coil. according to "Removal of Sound Blankets". Four way valve coil 2 Pull out the electronic Electronic expansion expansion valve coil. valve coil (R14026) 3 Remove the putty. Warning Be careful not to get yourself burnt with the pipes and other parts that are heated by the gas brazing machine. (R5893) Warning ■ Before working, make sure If the refrigerant gas leaks that the refrigerant gas is during work, ventilate the empty in the circuit. room. (If the refrigerant gas ■ Be sure to apply nitrogen is exposed to flames, toxic replacement when heating gas may be generated.) up the brazed part. Heat up the 2 brazed Caution parts and disconnect From the viewpoint of global them in the order of (a) environment protection, do (b). not discharge the refrigerant gas in the atmosphere. Make sure to collect all the (R14030) refrigerant gas.

14.Removal of Compressor

Procedure

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

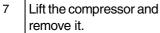


Removal of Compressor Si00-777

Step

- Before working, make sure that the refrigerant gas is empty in the circuit.
- Be sure to apply nitrogen replacement when heating up the brazed part.
 - Heat up the brazed part of the discharge side and disconnect.

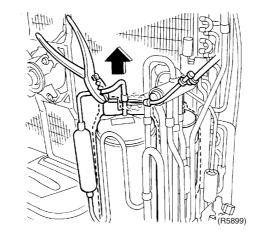
6 Heat up the brazed part of the suction side and disconnect.

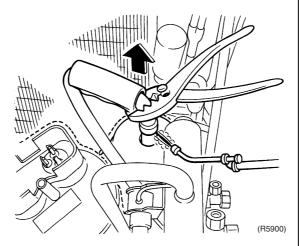


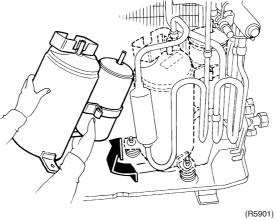
Note:

- Do not use a metal saw for cutting pipes by all means because the sawdust comes into the circuit.
- When withdrawing the pipes, be careful not to pinch them firmly with pliers. The pipes may get deformed.
- Provide a protective sheet or a steel plate so that the brazing flame cannot influence peripheries.
- Be careful so as not to burn the compressor terminals, the name plate, the heat exchanger fin.

Procedure







Points

Warning Be careful not to get yourself burnt with the pipes and other parts that are heated by the gas brazing machine.

Warning If the refrigerant gas leaks during work, ventilate the room. (If the refrigerant gas is exposed to flames, toxic gas may be generated.)

Warning Since it may happen that the refrigerant oil in the compressor catches fire, prepare wet cloth so as to extinguish fire immediately.

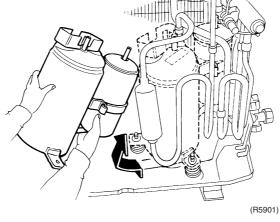
Caution From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.

Cautions for restoration

- 1. Restore the piping by nonoxidation brazing.
- 2. It is required to prevent the carbonization of the oil inside the four way valve and the deterioration of the gaskets affected by heat. (Keep below 120°C.) For the sake of this, wrap the four way valve with wet cloth and provide water so that the cloth does not dry.

In case of difficulty with gas brazing machine

- 1. Disconnect the brazed part where is easy to disconnect and restore.
- 2. Cut pipes on the main unit with a tube cutter in order to make it easy to disconnect.



Revision History

Month / Year	Version	Revised contents
07 / 2013	Si00-777	First edition



- 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/global_ac/

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