



# 11.2/14.0/16.0 kW Class











# Service Manual Removal Procedure

# **Outdoor Unit**

## Cooling Only

RMKS112EV1A RMKS140EV1A RMKS160EV1A

## ●Heat Pump

RMXS112E8V1B RMXS140E8V1B RMXS160E8V1B

RMXS112EVLT RMXS140EVLT RMXS160EVLT

RMXS112EV1A RMXS140EV1A RMXS160EV1A

## ●BP Unit BPMKS967A2

BPMKS967A3

BPMKS967B2B BPMKS967B3B

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- The illustrations may be slightly different depending on the model.
- The illustrations are for heat pump models as representative.

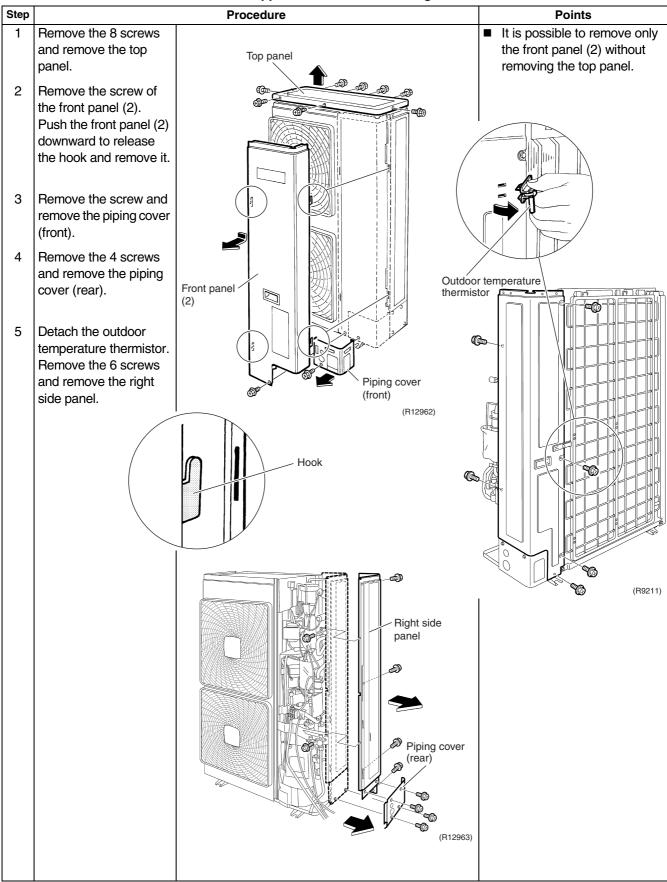
## 1. Outdoor Unit

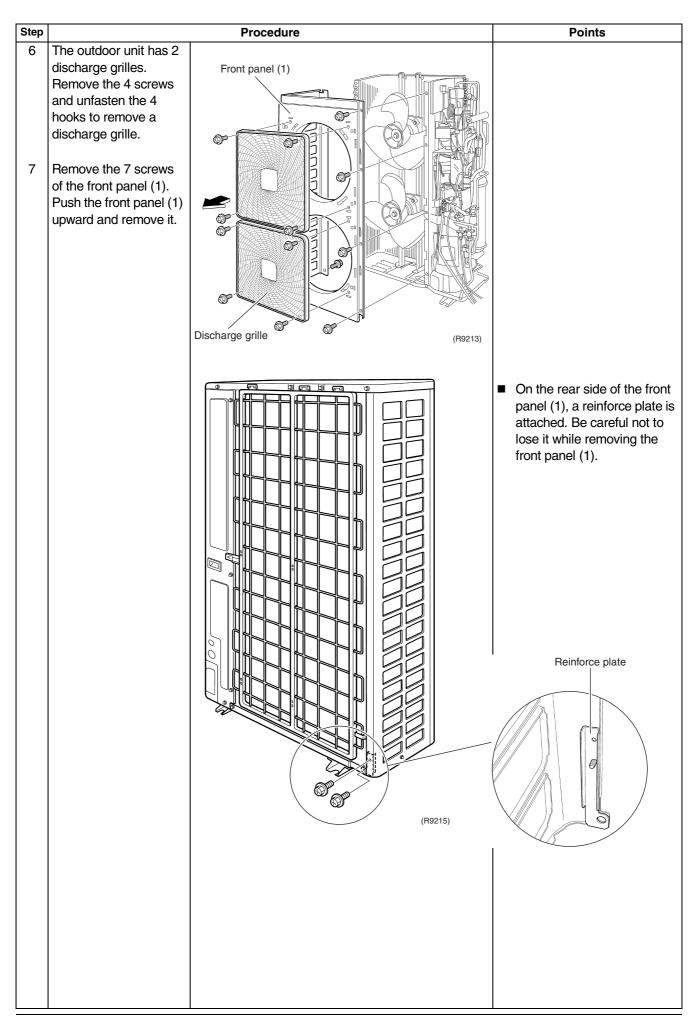
## 1.1 Removal of Outer Panels

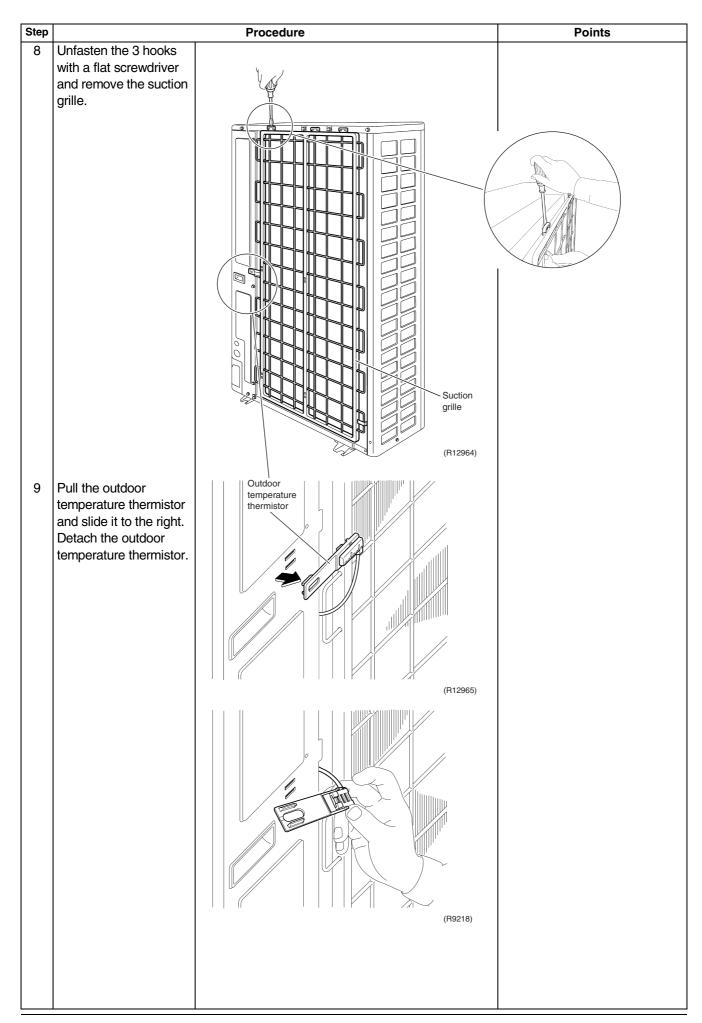
#### **Procedure**

Warning

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







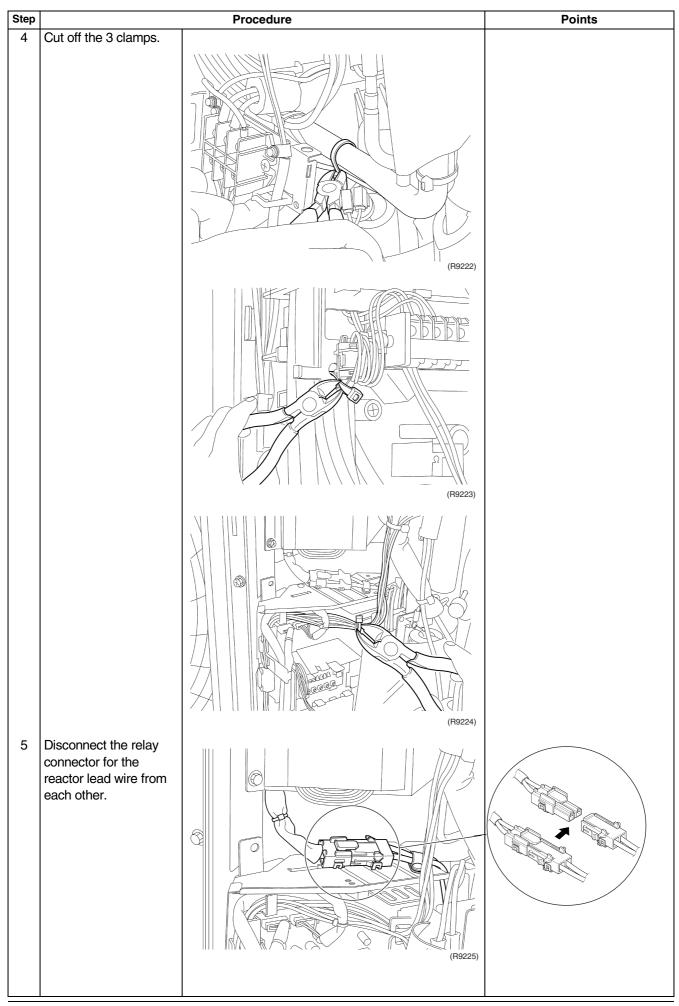
# 1.2 Removal of PCBs / Electrical Components

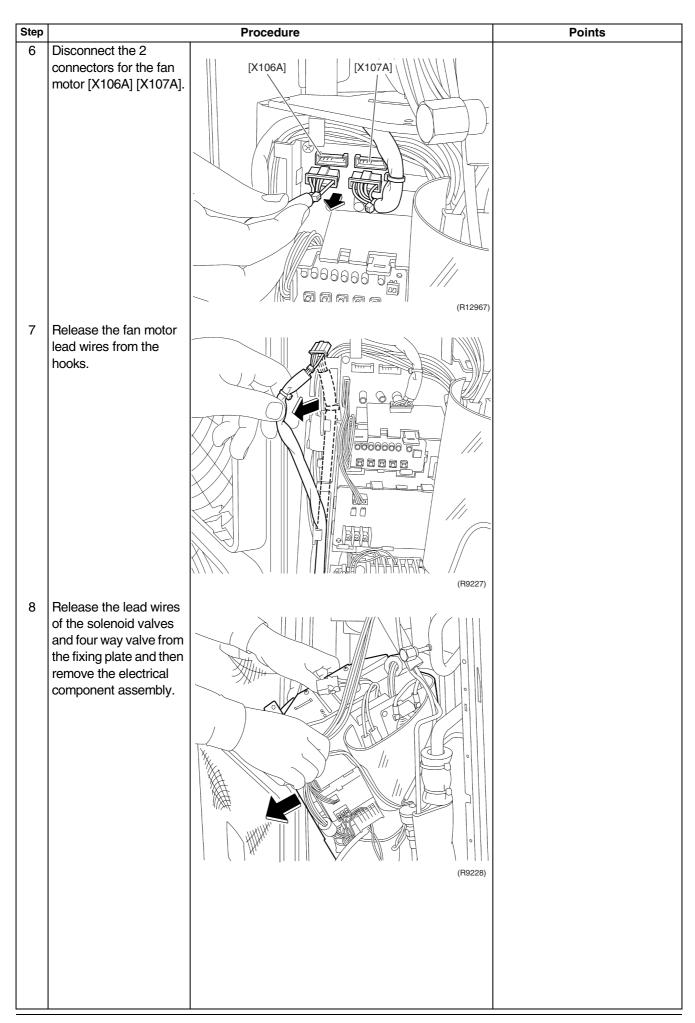
**Procedure** 

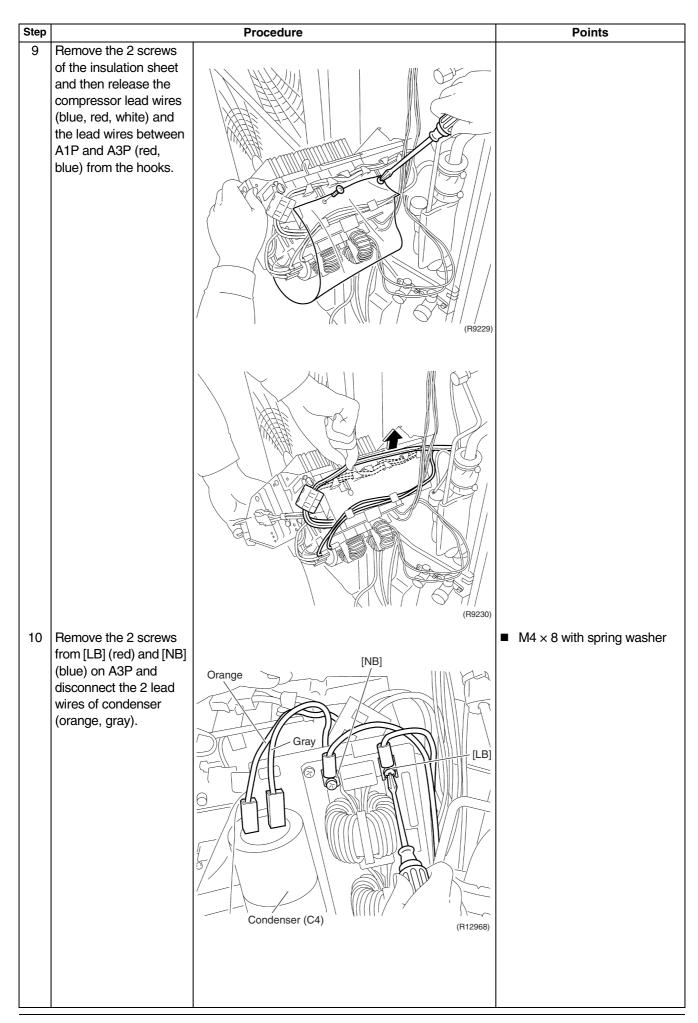
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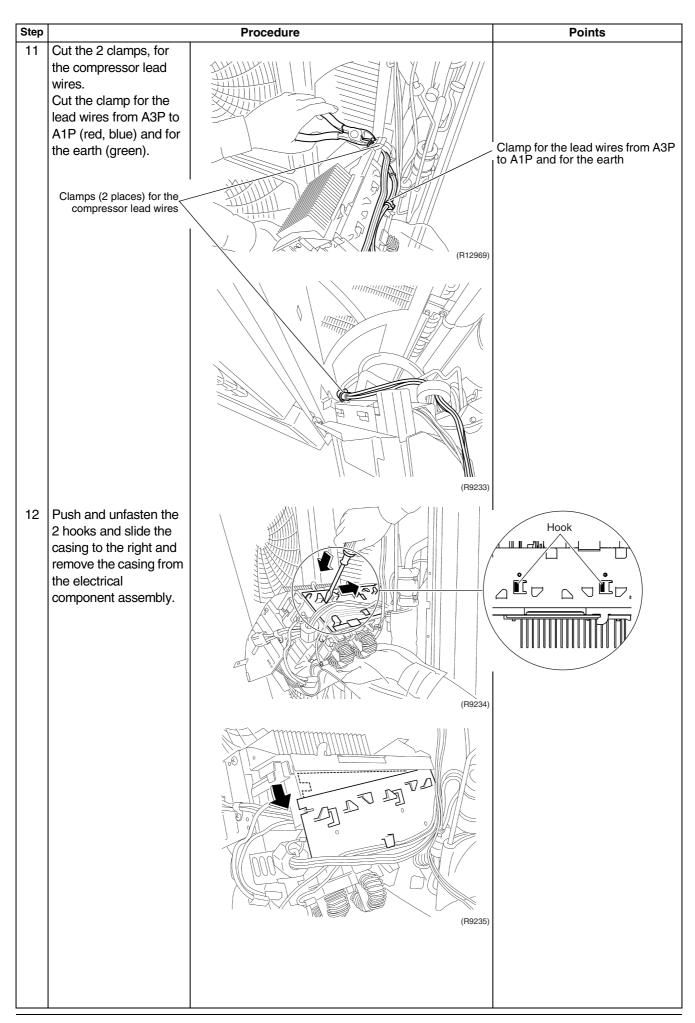
Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

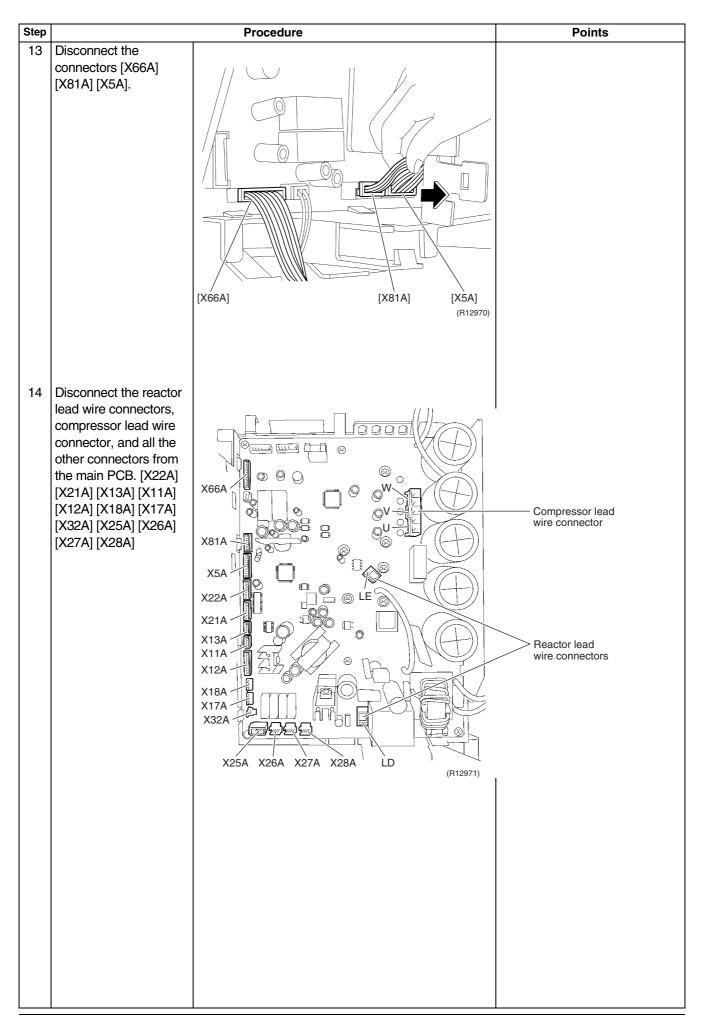
Step		Procedure	Points
1	Remove the 2 screws of the terminal mounting plate.	Terminal mounting plate  (R12966)	Preparation ■ Remove the outer panels according to the "Removal of Outer Panels". ■ M5(3) × 12
2	Remove the screw above the electrical component assembly.	(R9220)	■ M5(3) × 12
3	Unfasten the clamp from the terminal mounting plate.	(R9221)	

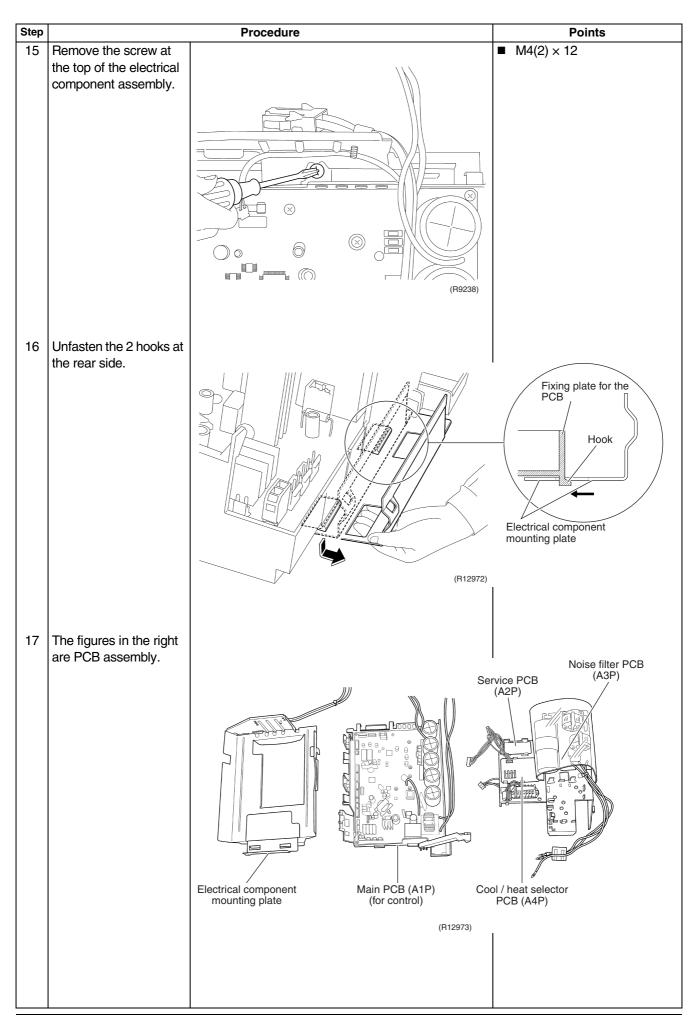










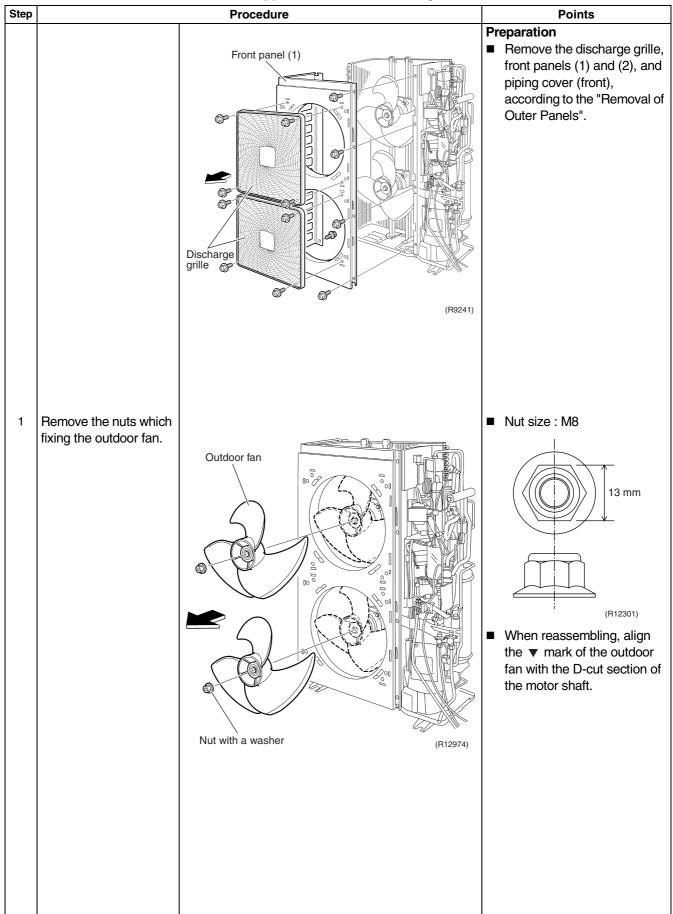


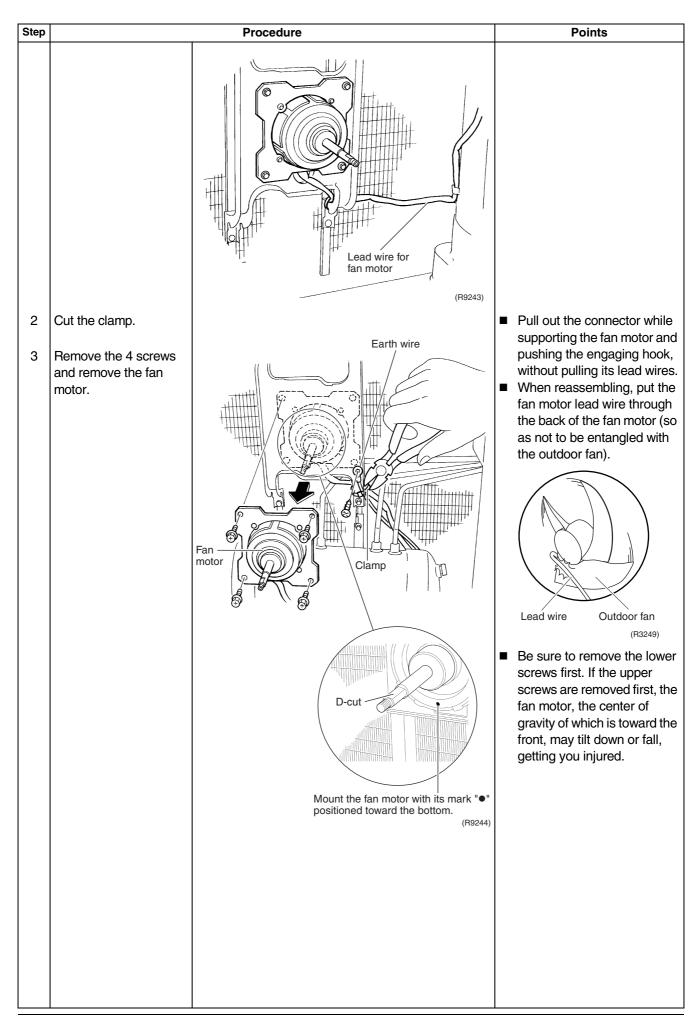
## 1.3 Removal of Outdoor Fans / Fan Motors

**Procedure** 



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



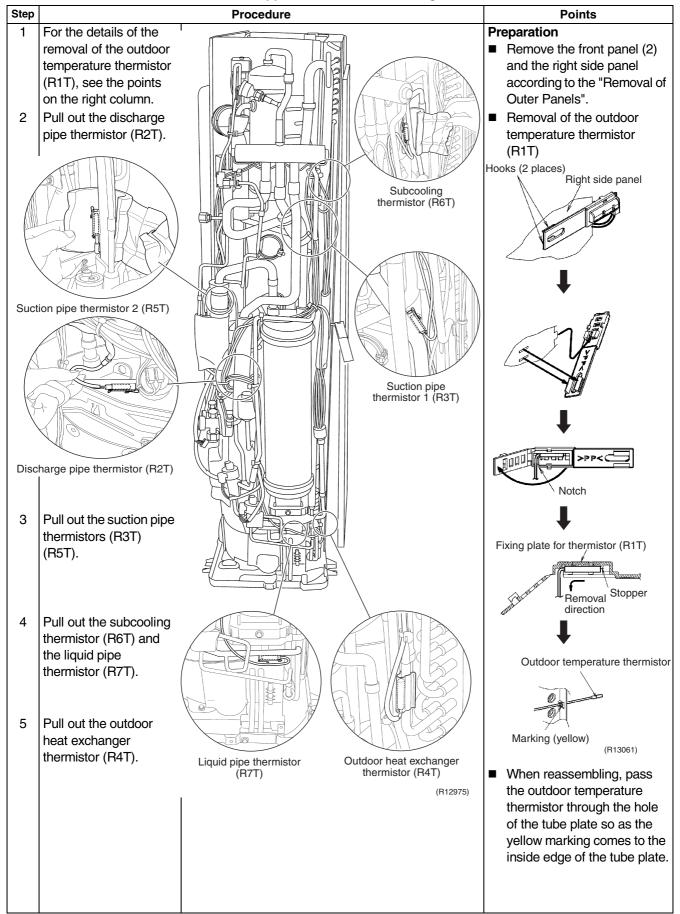


### 1.4 Removal of Thermistors

#### **Procedure**

**/ Marning** 

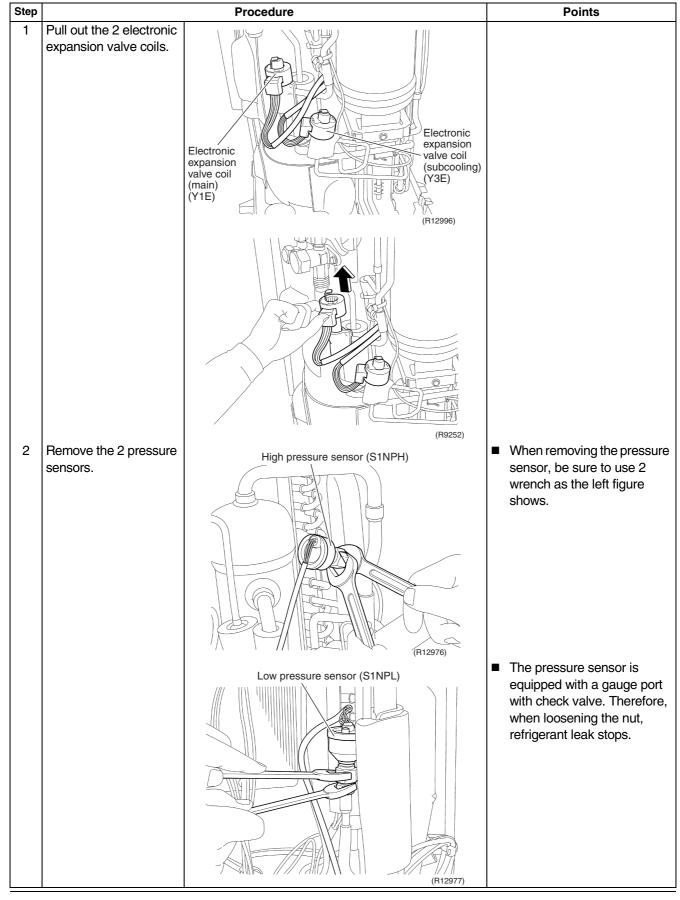
Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

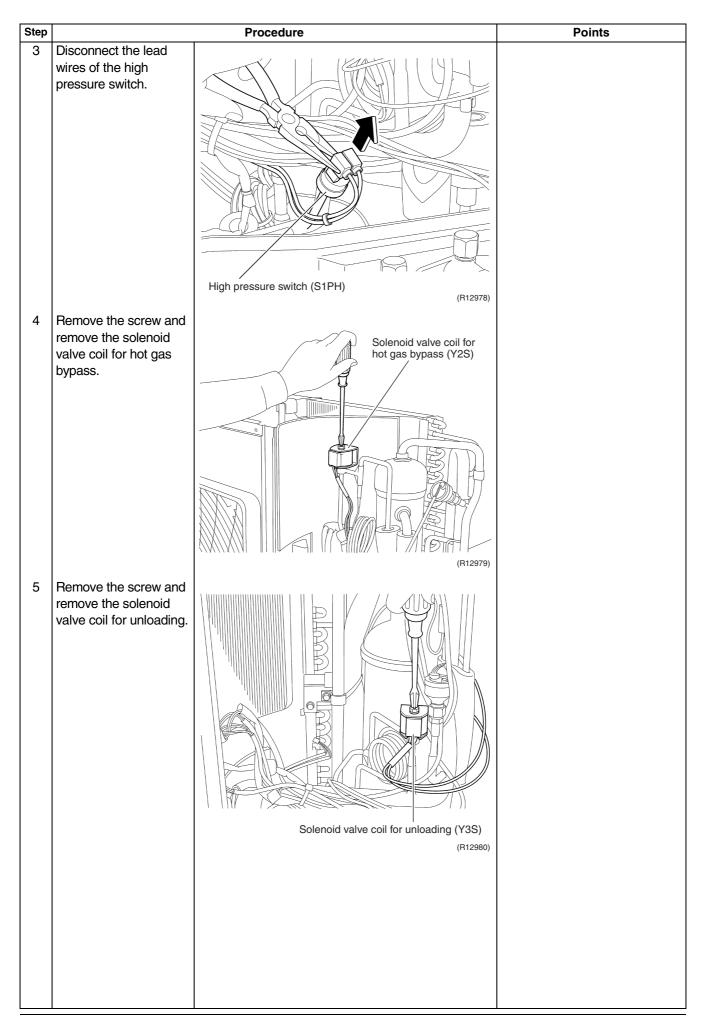


# 1.5 Removal of Electronic Expansion Valves / Peripheral Equipments

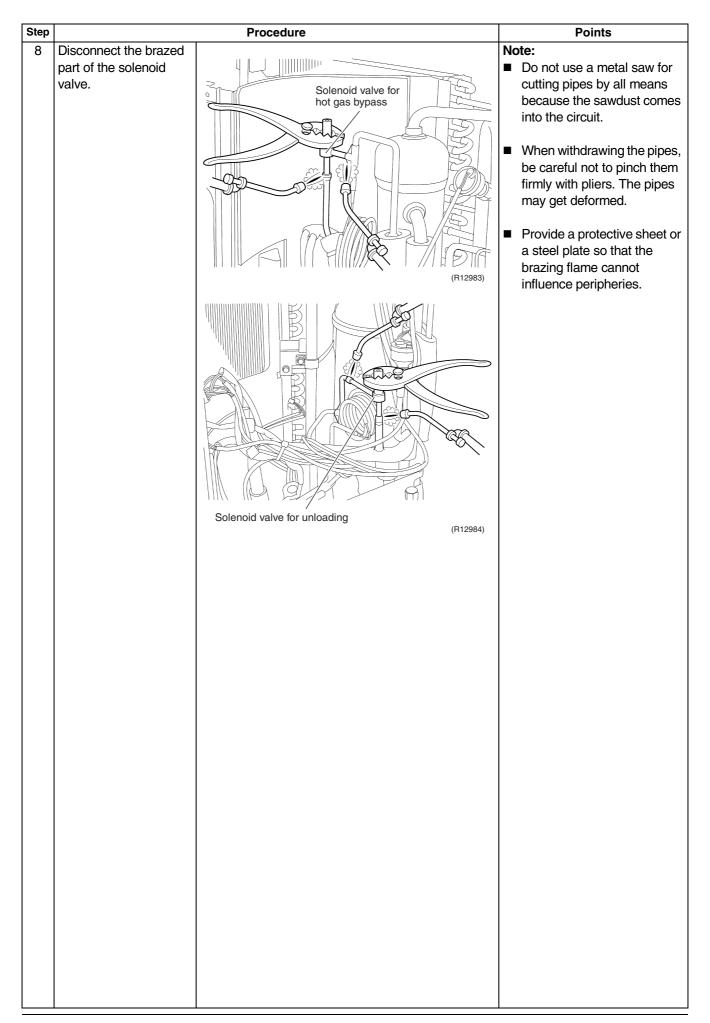
**Procedure** 

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





#### Step Procedure **Points** ■ Before working, make sure that the refrigerant Flectronic Warning expansion valve gas is empty in the circuit. Be careful not to get yourself (main) burnt with the pipes and other ■ Be sure to apply nitrogen replacement when parts that are heated by the gas brazing machine. heating up the brazed part. !\ Warning Disconnect the brazed If the refrigerant gas leaks part of the electronic during work, ventilate the expansion valve. room. (If the refrigerant gas is Electronic expansion valve exposed to flames, toxic gas (subcooling) may be generated.) Caution From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make (R12981) sure to collect all the 7 Disconnect the brazed refrigerant gas. part of the high pressure switch. **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. Brazed part High pressure switch In case of difficulty with gas (R13062) 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.



## 1.6 Removal of Four Way Valve

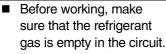
#### **Procedure**

Warning

**Procedure** 

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

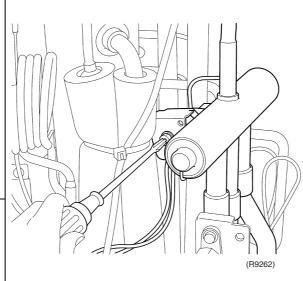
Step	
1	Remove the screw and
	remove the four way
	valve coil.

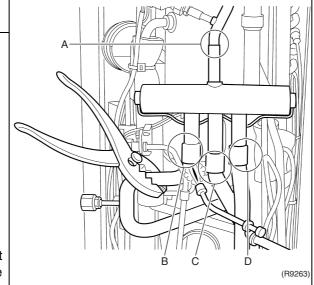


- Be sure to apply nitrogen replacement when heating up the brazed part.
- 2 Disconnect the brazed part of the four way valve (A, B, C, D).

#### 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.





**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.
- 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.

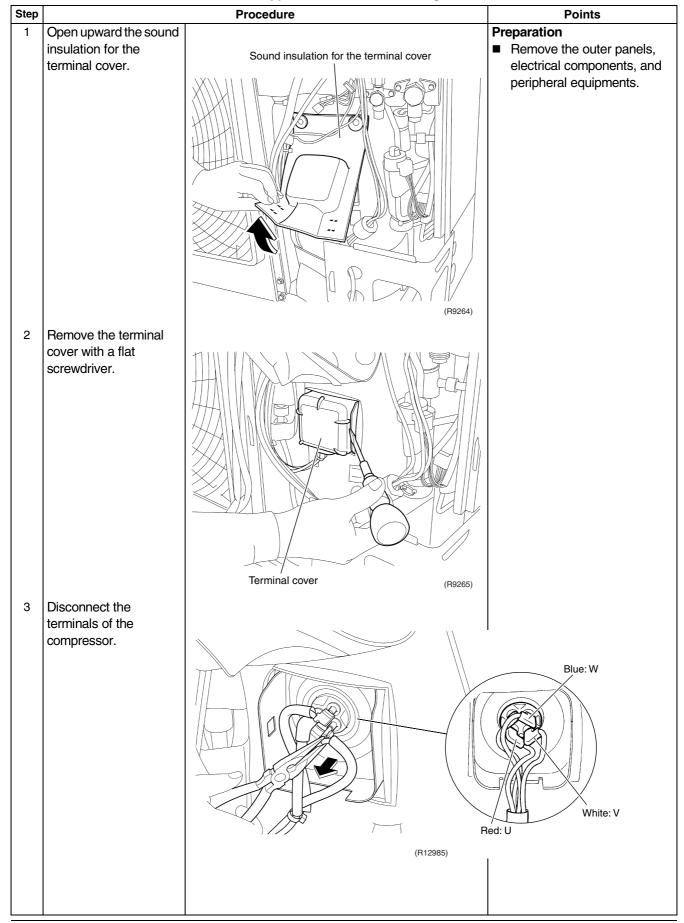
# In case of difficulty with gas brazing machine

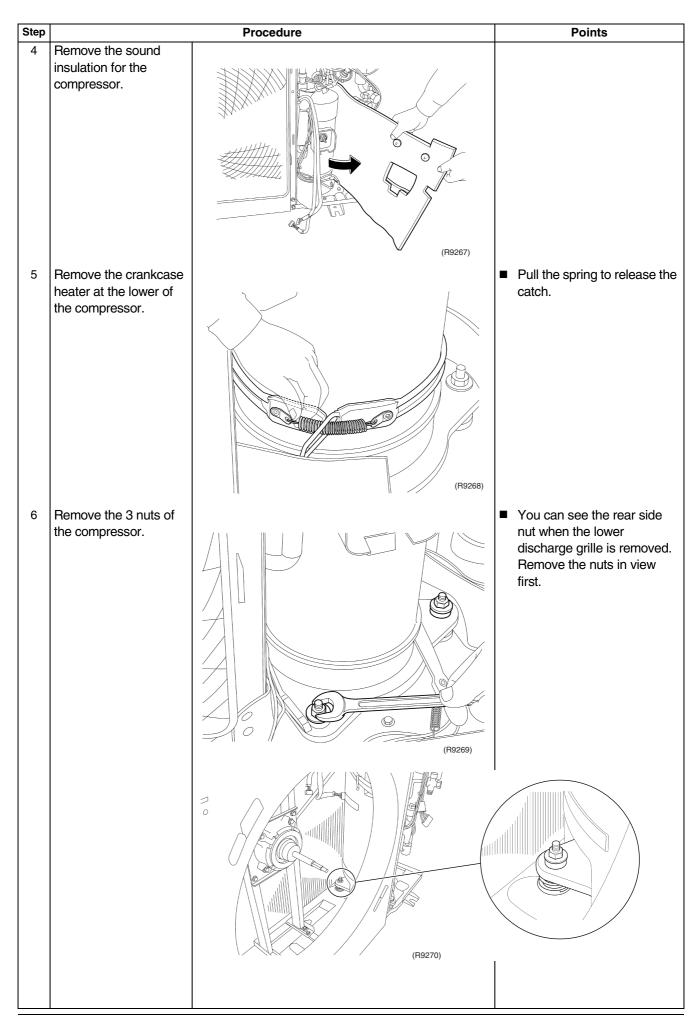
- Disconnect the brazed part where is easy to disconnect and restore.
- 2. Cut pipes on the main unit with a tube cutter in order to make it easy to disconnect.

# 1.7 Removal of Compressor

#### **Procedure**

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





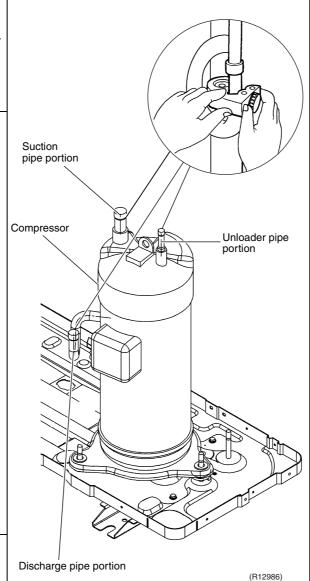
Procedure

# ■ 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.
- 7 Cut off the suction pipe, discharge pipe and unloader pipe of compressor with a pipe cutter (3 places).
- 8 Remove the compressor.
- 9 Disconnect the brazed parts and remove the remained pipes.

#### 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.



**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 non-oxidation 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

- 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.

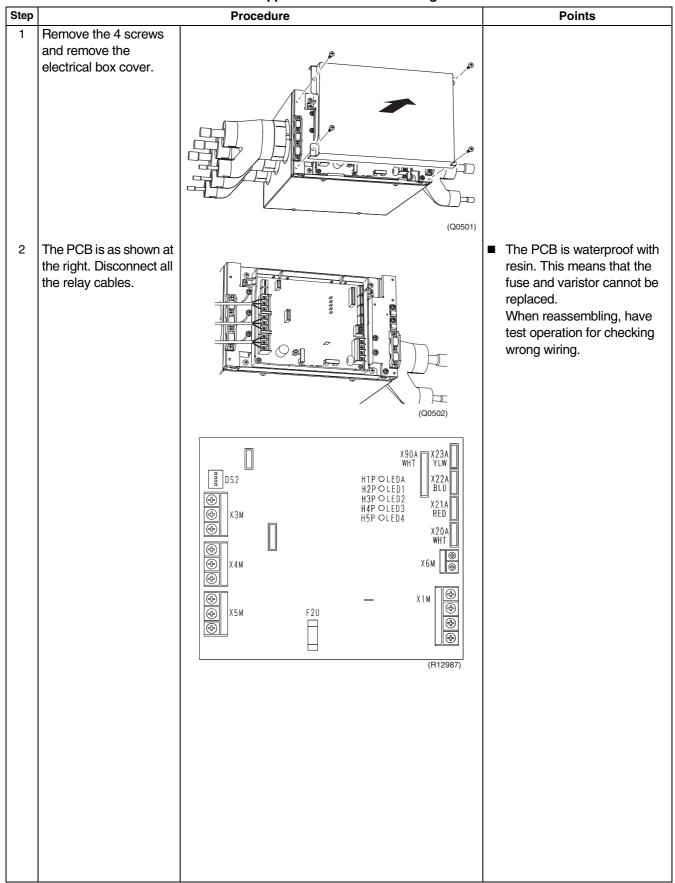
Si181095 BP Unit

## 2. BP Unit

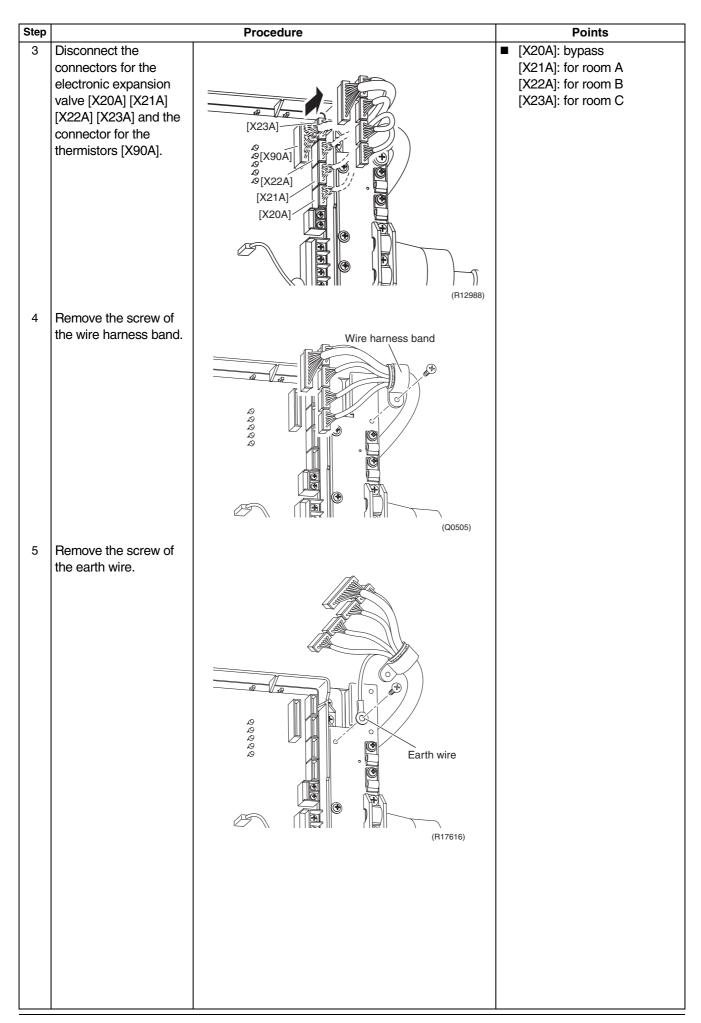
## 2.1 Removal of PCB Assembly

**Procedure** 

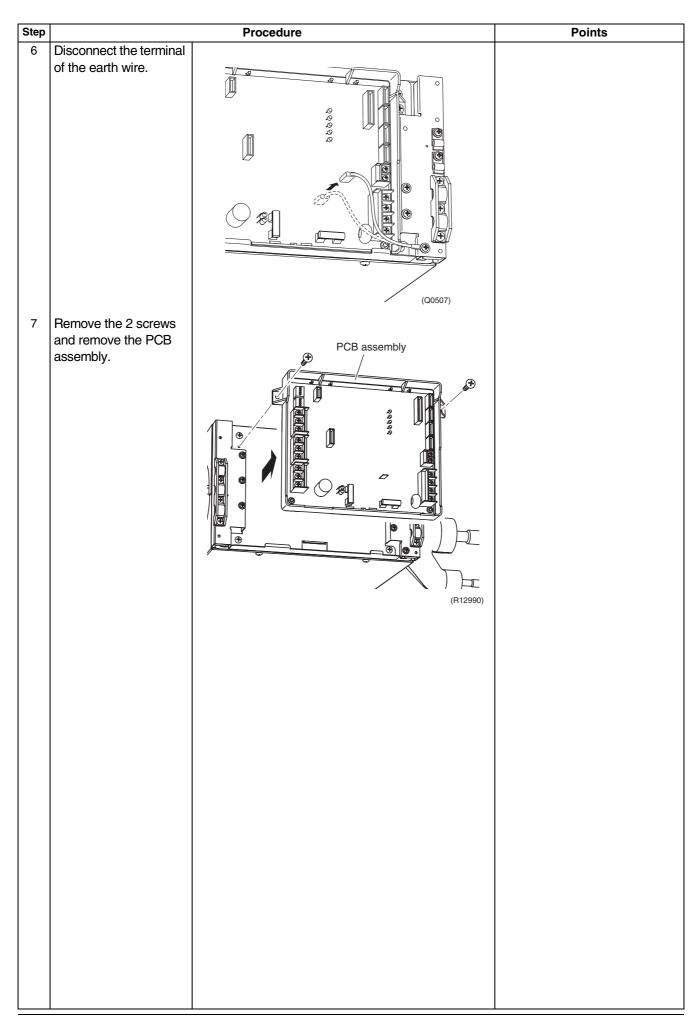
Warning Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.



BP Unit Si181095



Si181095 BP Unit



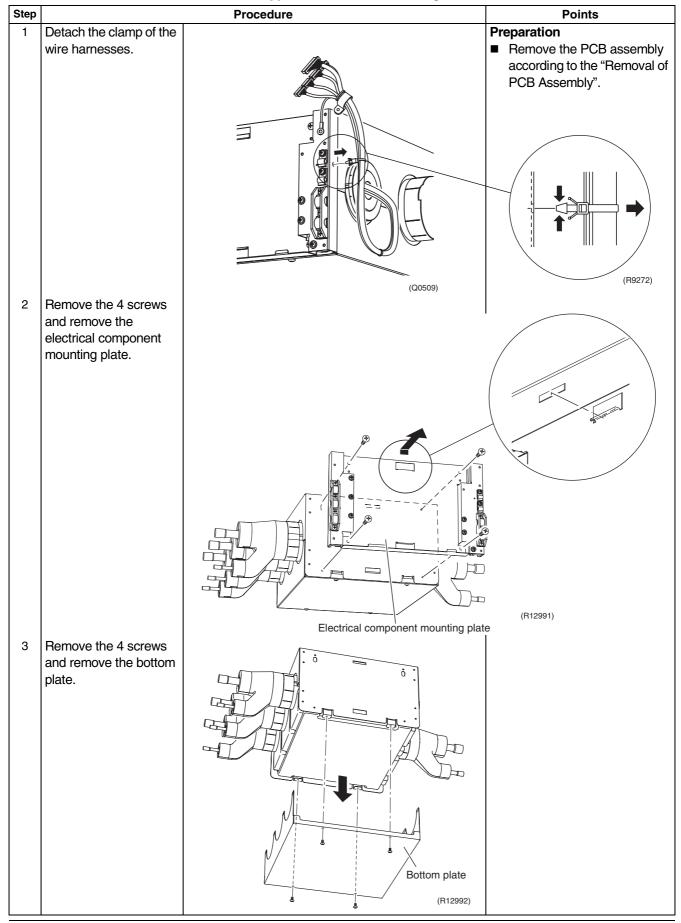
BP Unit Si181095

## 2.2 Removal of Electronic Expansion Valve Coils

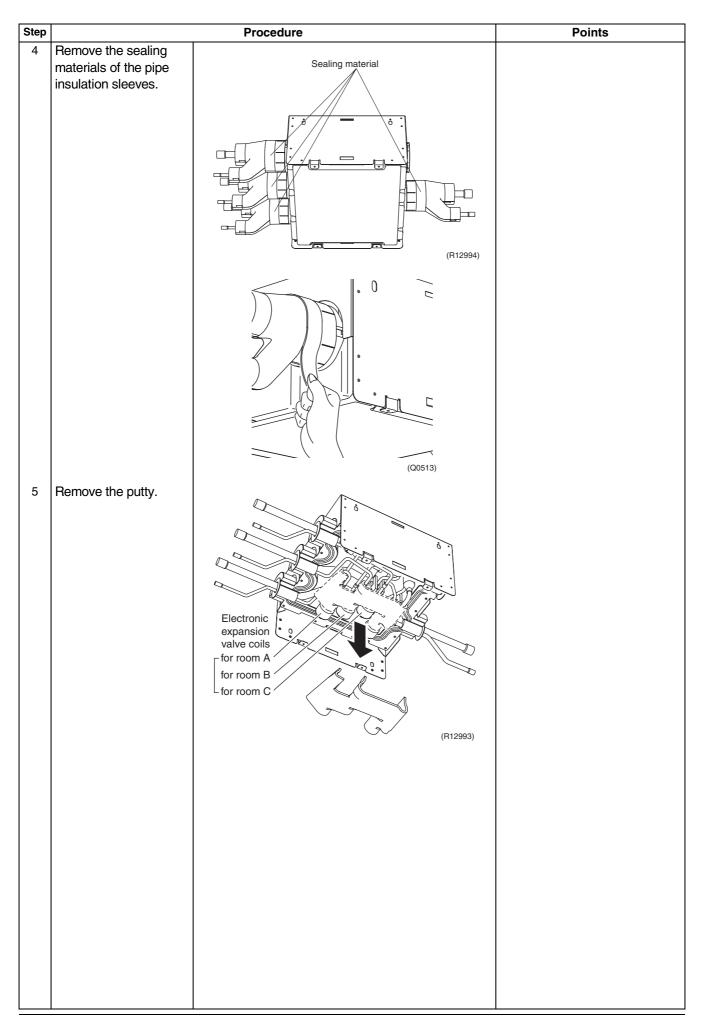
**Procedure** 

/ Warning

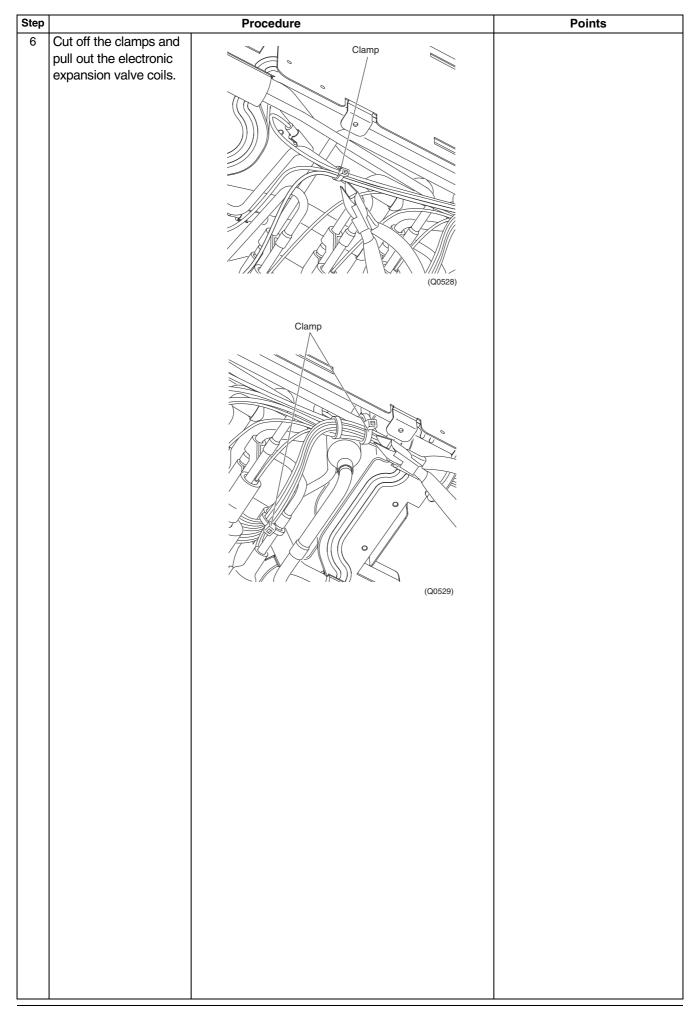
Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.



Si181095 BP Unit



BP Unit Si181095



# **Revision History**

Month / Year	Version	Revised contents
01 / 2013	Si181095	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

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