DAIKIN

Si341211

REMOVAL PROCEDURE

SERVICE MANUAL

SERVICE MANUAL

4/5/6 HP Class

- Outdoor Unit
- Inverter
- Multi Type

Service Manual
Removal Procedure

Outdoor Unit

Applicable Models

●Cooling Only

RXMQ4PVE
RXMQ5PVE
RXMQ6PVE
RXMQ4PVEE
RXMQ5PVEE
RXMQ6PVEE

●Heat Pump

RXYMQ4PVE
RXYMQ5PVE
RXYMQ6PVE

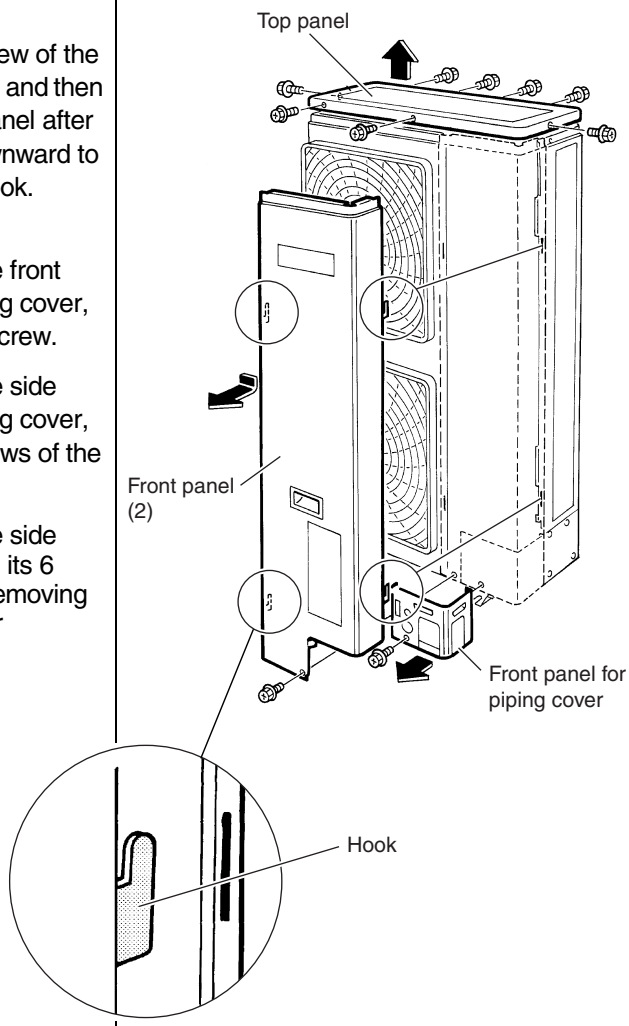
Table of Contents

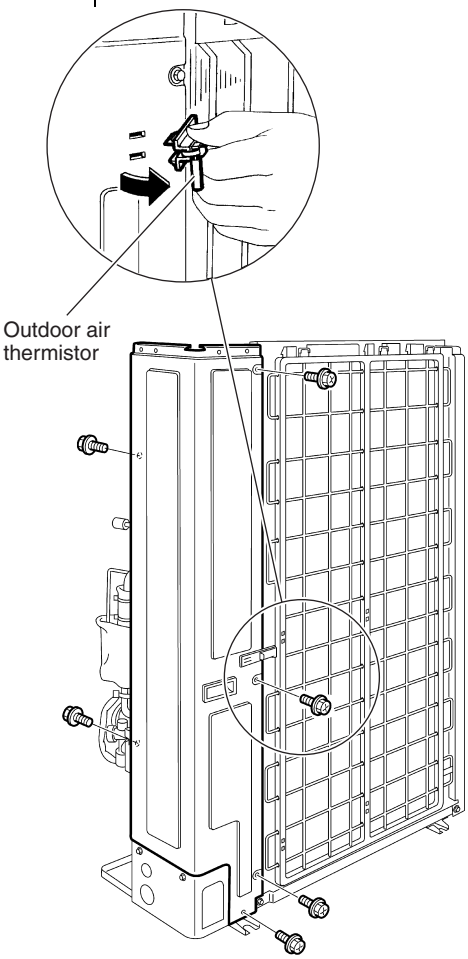
1. Procedure to Remove Outside Panels

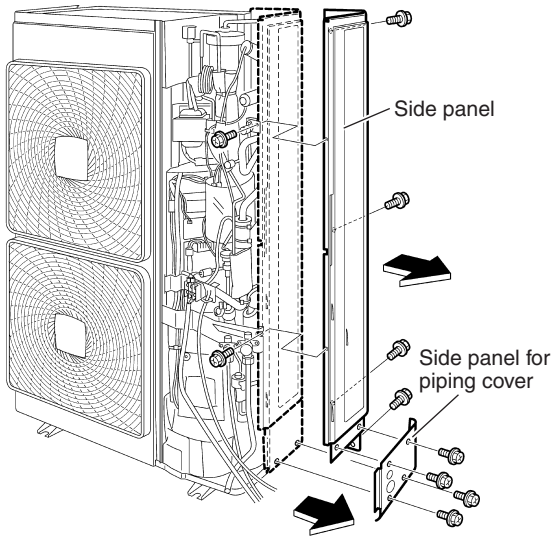
Procedure

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

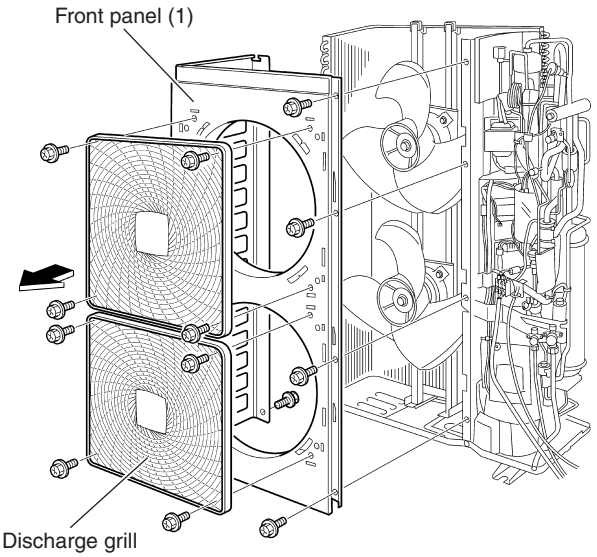
Step	Procedure	Points
1	Remove 8 screws of the top panel.	■ It is possible to remove only the front panel without removing the top panel.
2	Remove 1 screw of the front panel (2), and then remove the panel after pushing it downward to release the hook.	
3	To remove the front panel for piping cover, remove its 1 screw.	
4	To remove the side panel for piping cover, remove 4 screws of the side panel.	
5	To remove the side panel, remove its 6 screws after removing the outdoor air thermistor.	

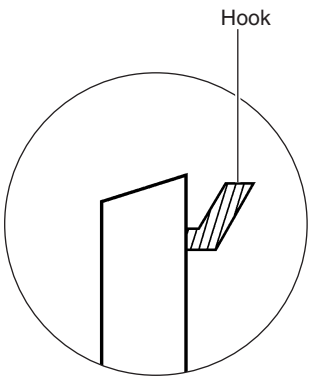


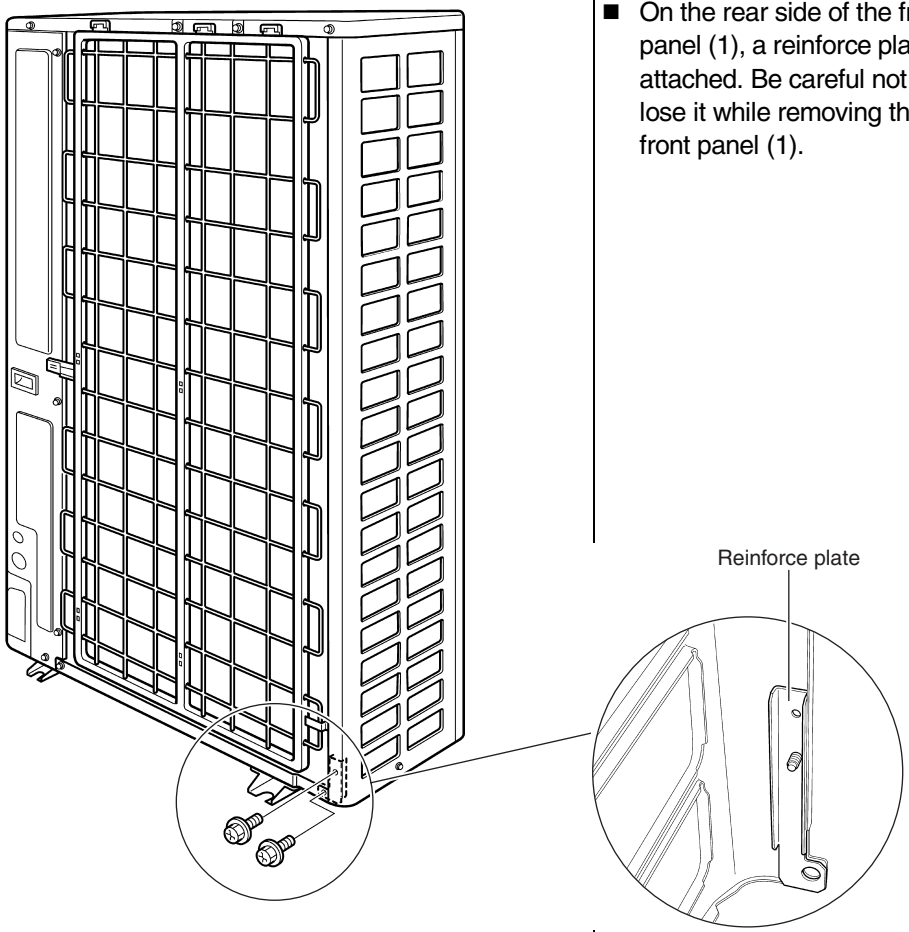




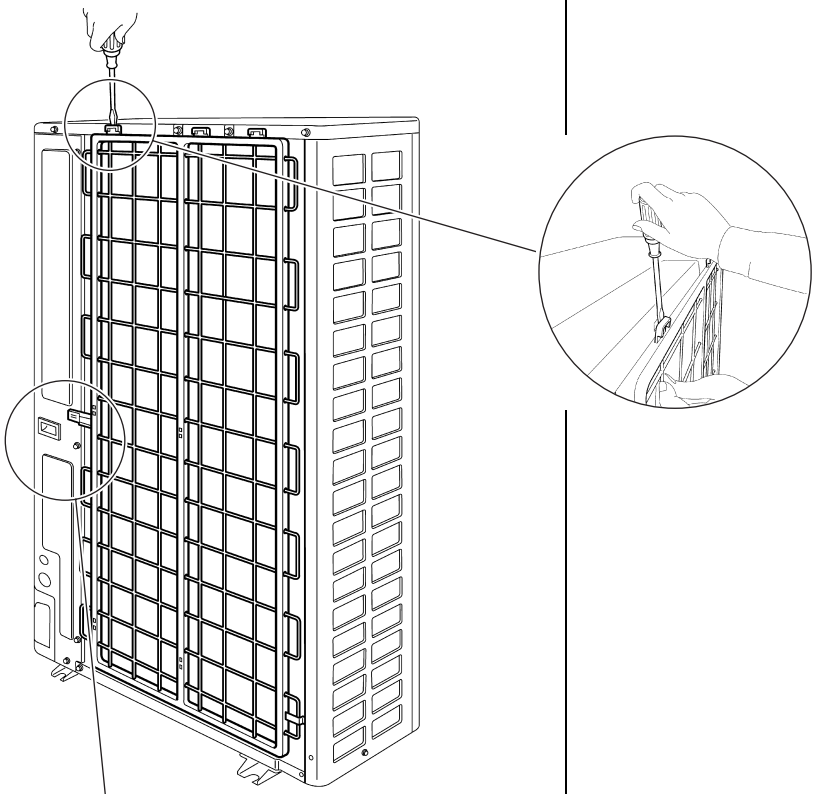
Step	Procedure	Points
6	Remove the discharge grill after removing its 4 screws and releasing its 4 hooks.	
7	Remove the front panel (1) after removing its 7 screws and pushing it upward.	■ On the rear side of the front panel (1), a reinforce plate is attached. Be careful not to lose it while removing the front panel (1).

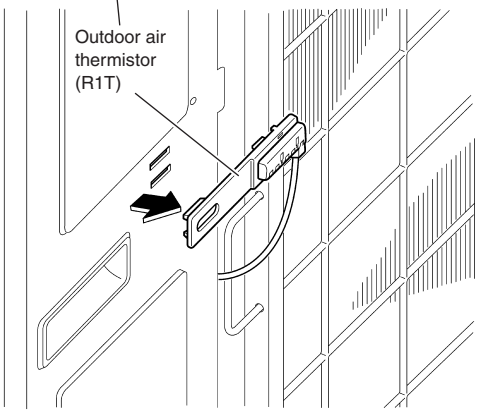


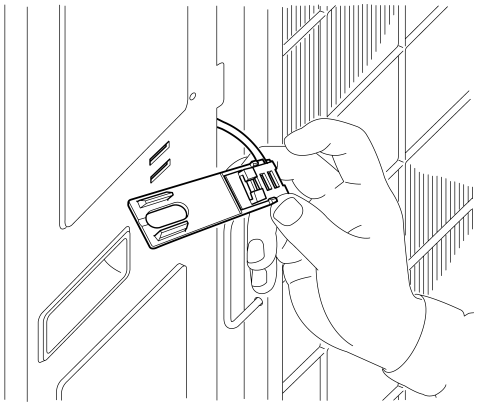




Step	Procedure	Points
8	Remove the heat exchanger cover after releasing its 3 hooks with a minus driver.	
9	Remove the outdoor air thermistor after pulling it to the near side and sliding to the right.	
10	The figure in the right is of rear side view.	



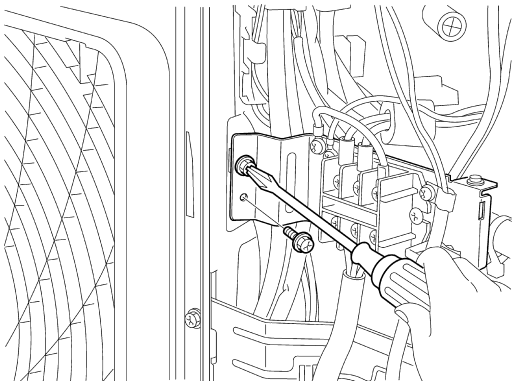
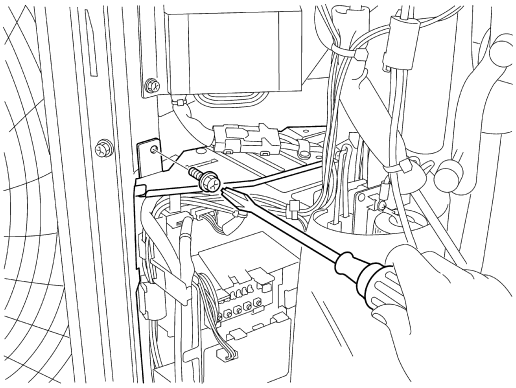
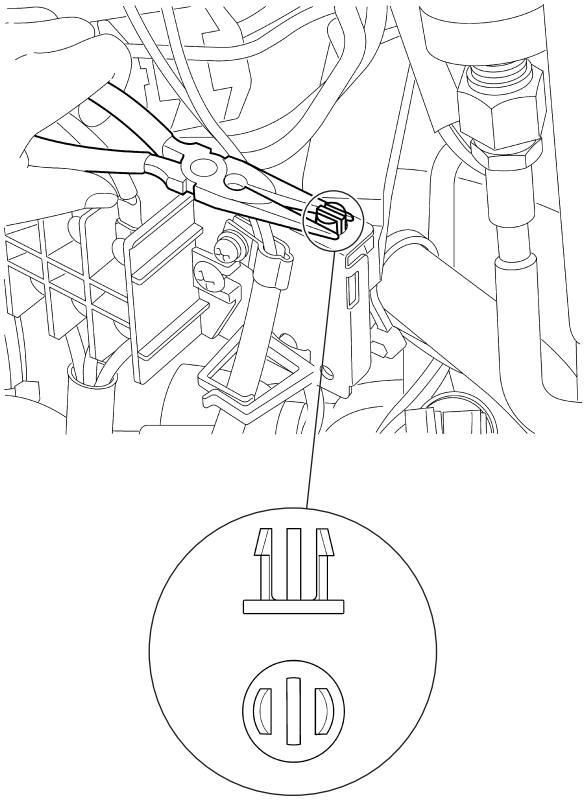




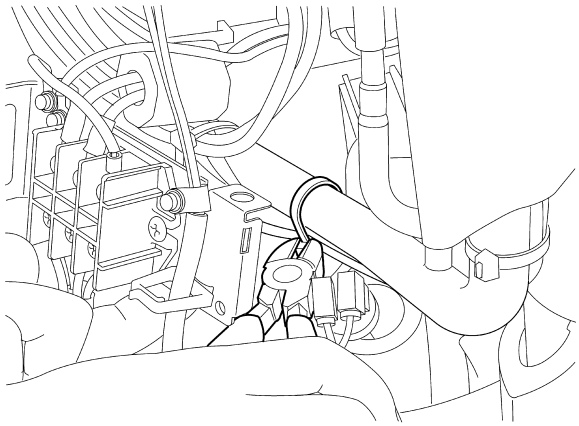
2. Procedure to Remove PCB and Electrical Component Box

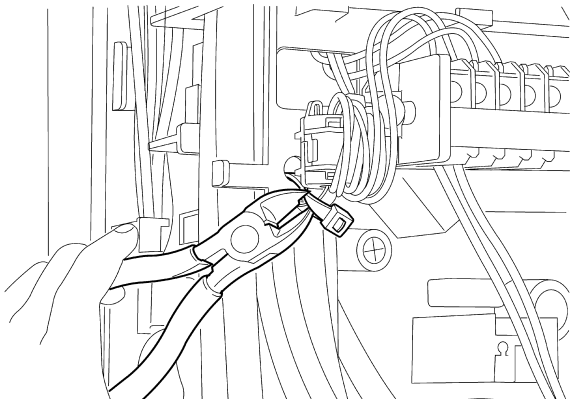
Procedure

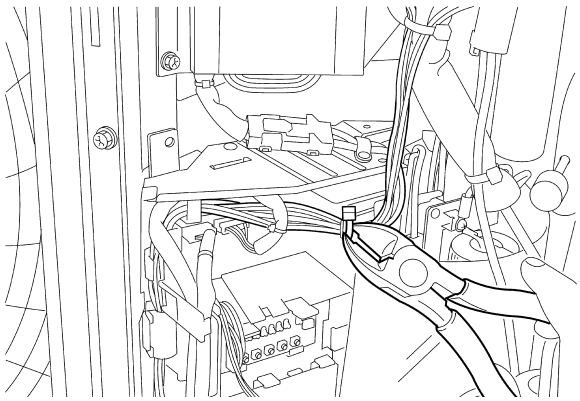
Warning **Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.**

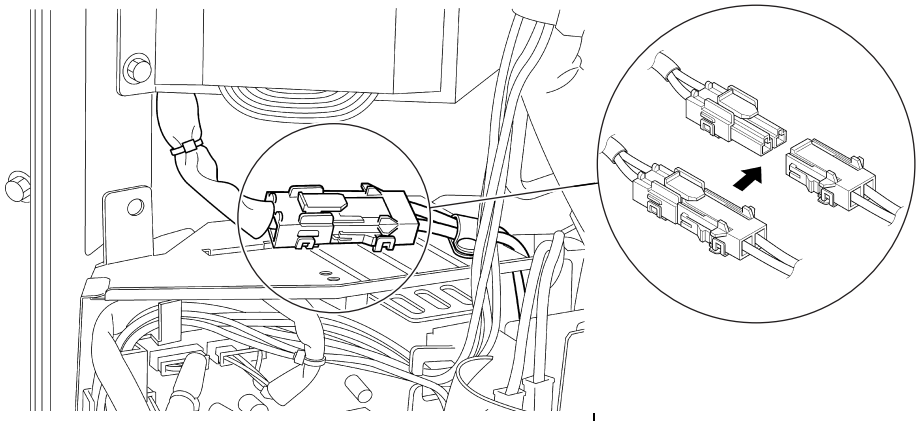
Step	Procedure		Points
1	Remove the 2 fixing screws (M5) of terminal block mounting plate.		Preliminary preparation ■ Remove the top, front and side panels according to the "Procedure to Remove Outside Panels".
2	Remove the fixing screw (M5) above the electrical component.		
3	Release the hook of the resin stay from the terminal block mounting plate.		

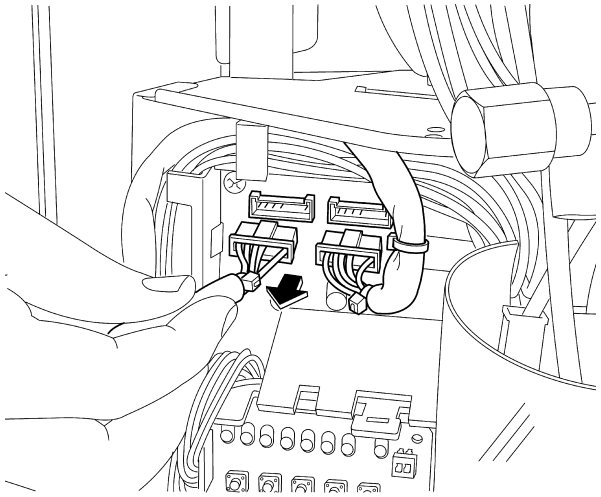
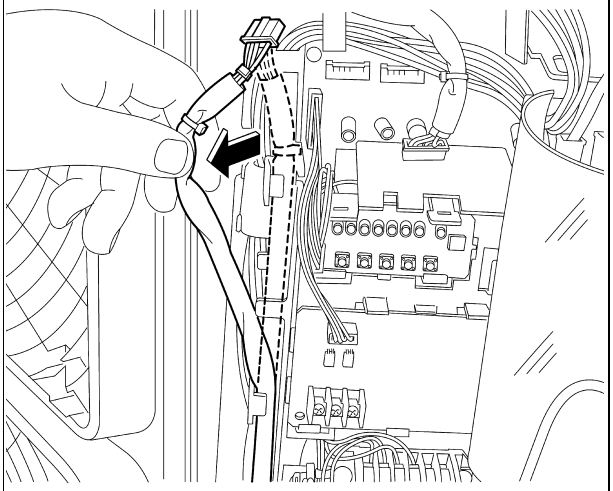
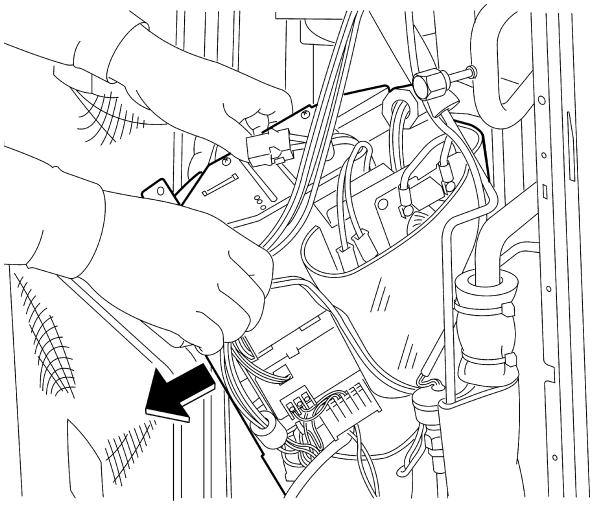
Step	Procedure	Points
4	Cut off the wiring clamp materials (3 places).	
5	Disconnect the connector set for the reactor lead wire from each other.	

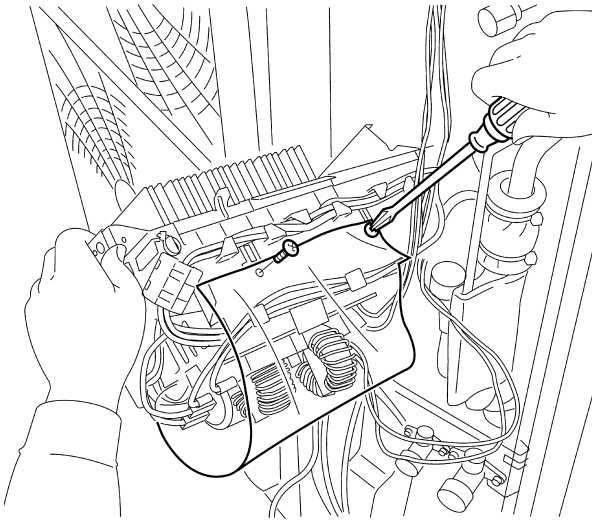
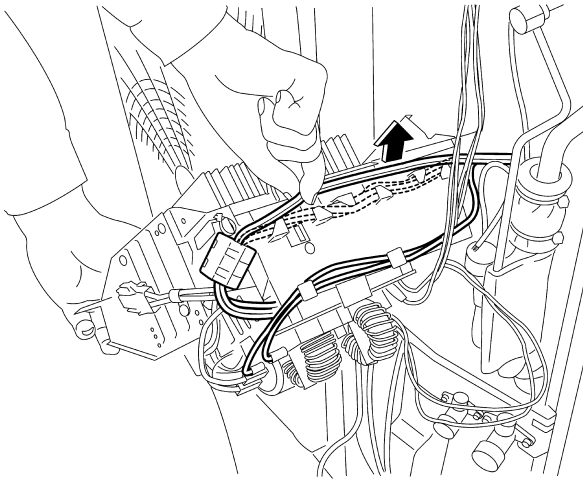
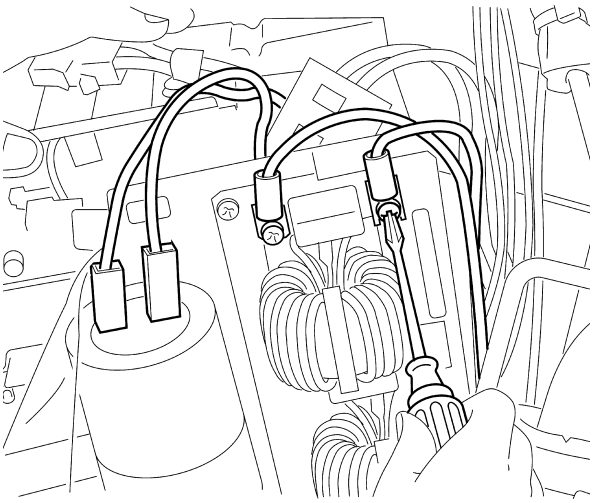




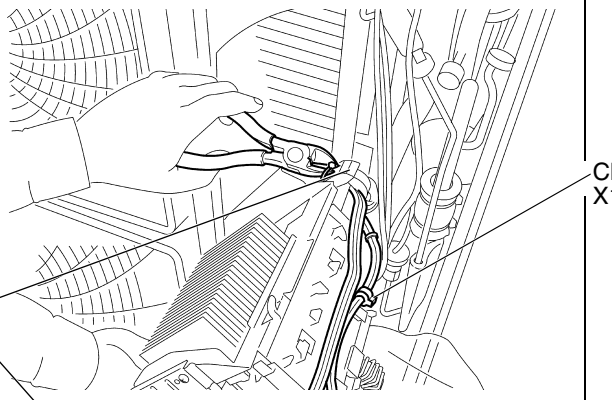


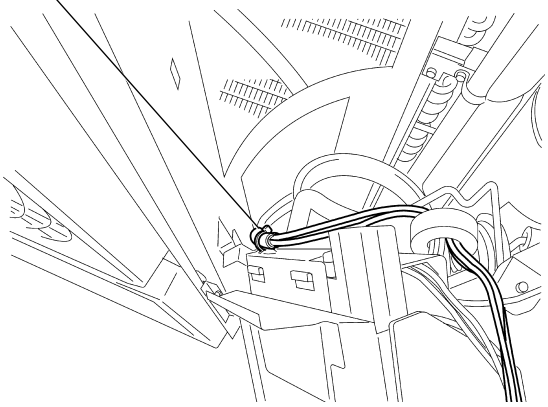


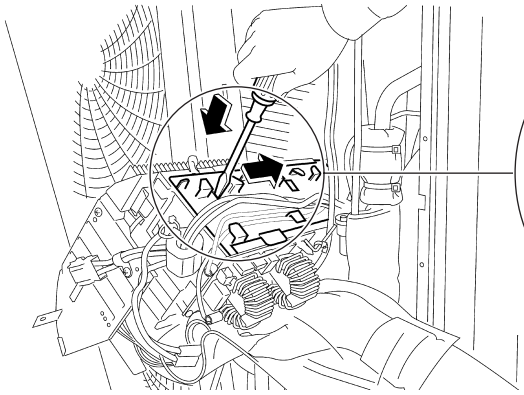
Step	Procedure		Points
6	Pull off the connector for the motor lead wires and then release the wire from the hook of resin casing.	 	
7	Remove the wire harnesses of the solenoid valve and the four way valve from the fixing plate and then remove the electrical component.		

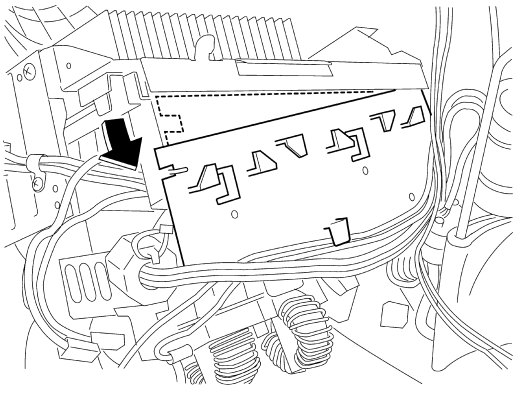
Step	Procedure		Points
8	Remove the 2 securing screws (M4) of insulation sheet and then release the lead wires to the compressor (blue, red and white colors) and the lead wires A1P to A3P (red and blue colors) from the hook of resin casing.	 	
9	Remove the 2 securing screws (M4 and with spring washers) for the lead wires A1P to A3P (red and blue colors) and the condenser lead wires (orange and ash colors).		

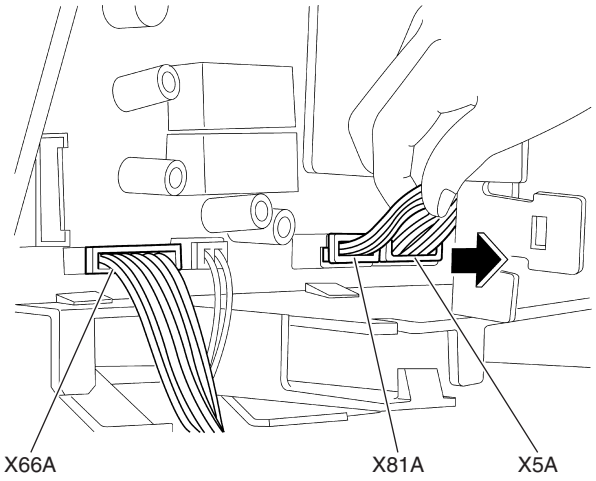
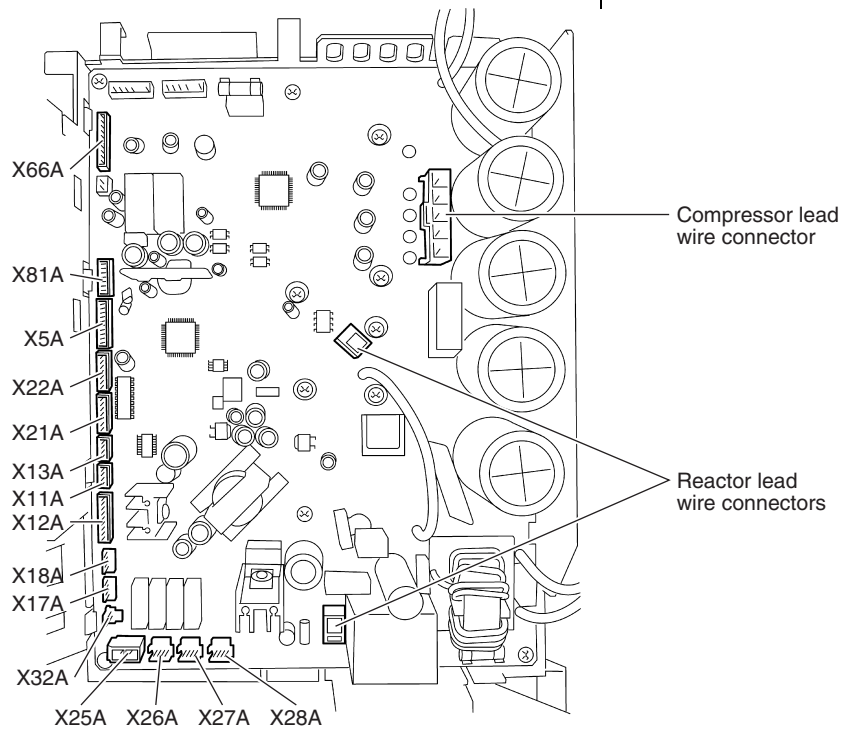
Step	Procedure	Points
10	Cut off the clamp materials, for fixing the compressor lead wires (2 places) and the lead wires A3P to X11 (red, blue, and green colors) (1 place).	
11	Fold the hooks (2 places) and slide the resin casing to the right to remove the casing from the electrical component assembly.	



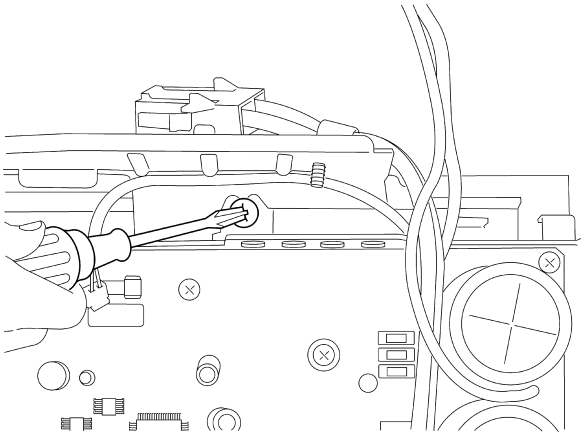


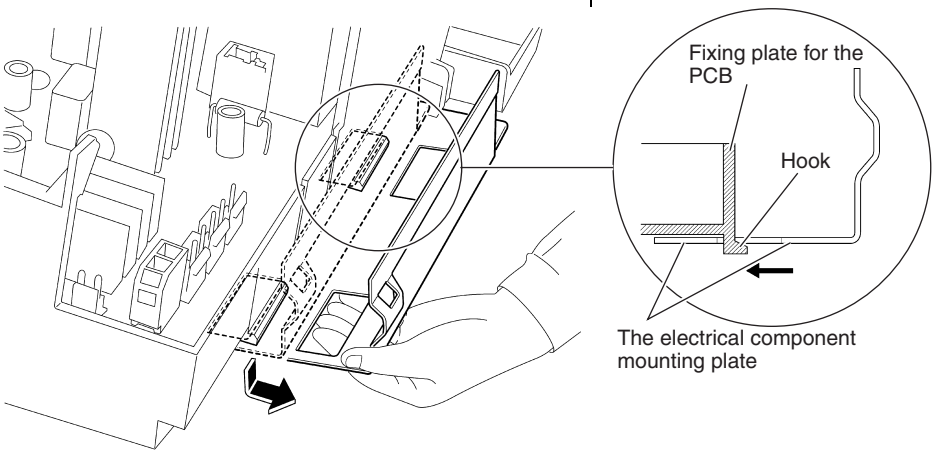


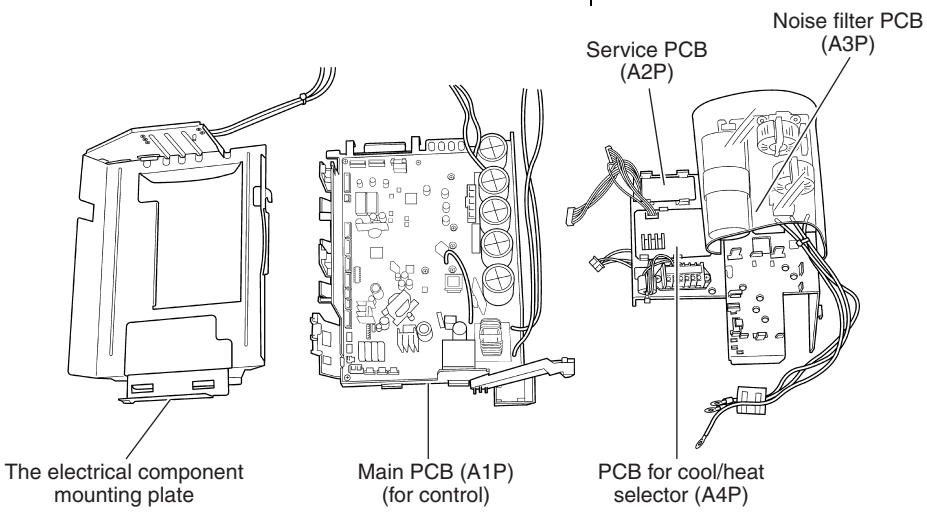


Step	Procedure		Points
12	Pull off the PCB connectors X66A, X81A and X5A.		
13	Pull off the reactor lead wire connectors, compressor lead wire one and lead wire ones X22A, X21A, X13A, X11A, X12A, X18A, X17A, X32A, X25A, X26A, X27A and X28A, by pulling them.		

Step	Procedure	Points
14	Remove the fixing screw (M4) at the top of the PCB assembly.	
15	Release the locking engaging hook (2 places) at the rear side.	
16	The figures in the right are PCB assembly.	



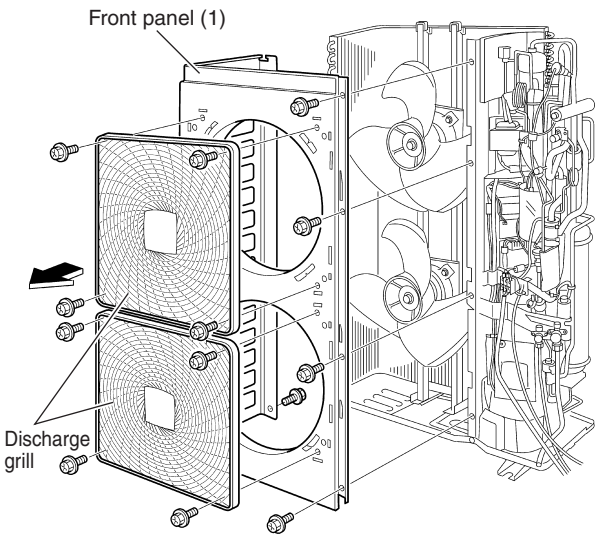
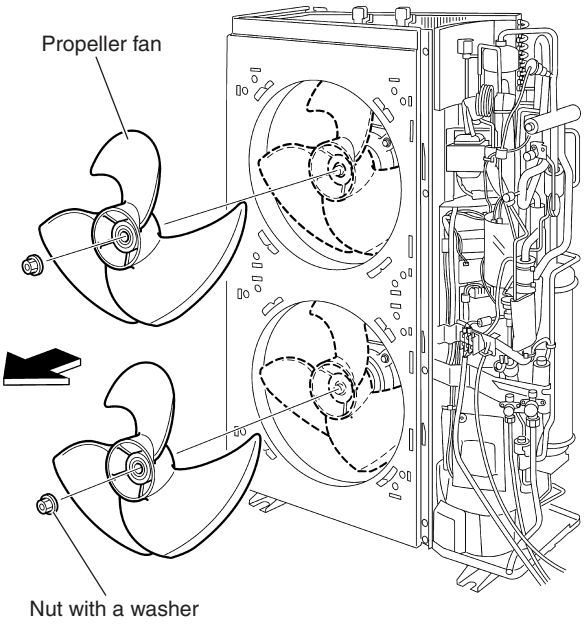


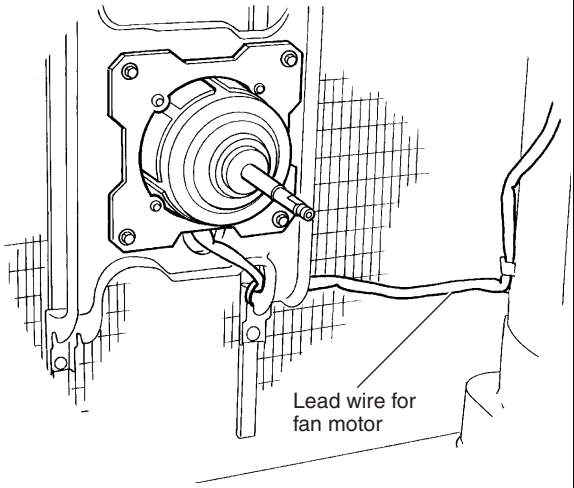
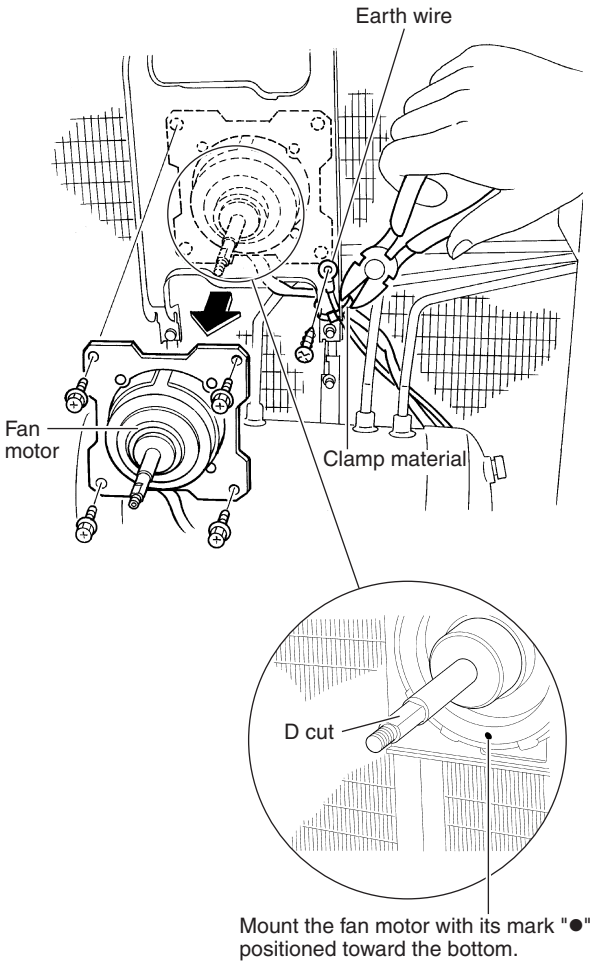
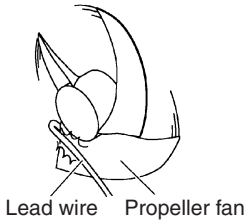


3. Procedure to Remove Propeller Fan and Fan Motor

Procedure

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

Step	Procedure		Points
			Preliminary preparation ■ Remove the discharge grill, front panel and front panel for piping cover, according to the "Procedure to Remove Outside Panels".
1	Remove the nuts with a washer, which fixing the propeller fan.		

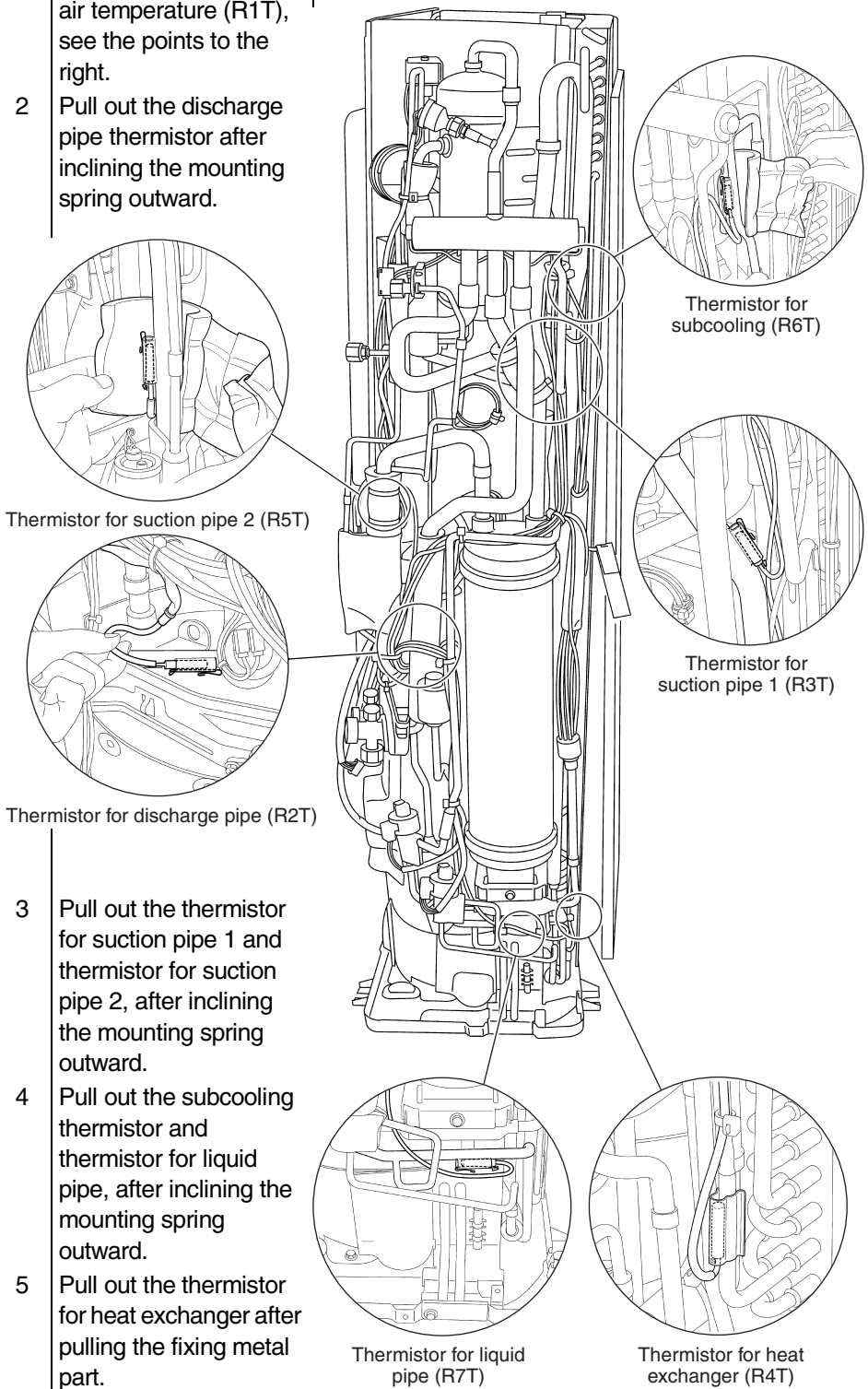
Step	Procedure		Points
			
2	Remove the clamp material.		■ Pull off the connector while supporting its body and pushing the engaging click, without pulling its lead wires. ■ Caution on mounting the motor If the motor lead wires are not fixed by using the clamp material, it may always damage the lead wire because the lead wires twined around the fan.
3	Remove the 4 fixing screws for fan motor and then remove the fan motor.		 ■ When mounting the propeller fan, make the D cut correspond to the hole of the fan.

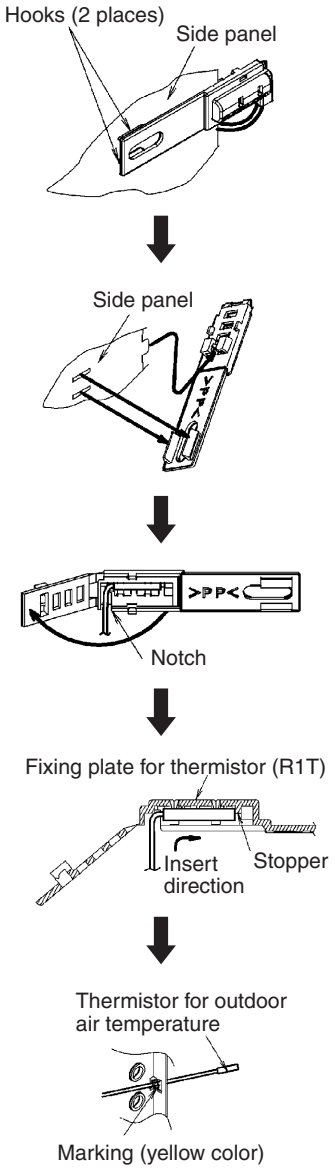
4. Procedure to Remove Thermistor

Procedure

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

Step	Procedure	Points
1	For the details of the removal of the thermistor for outdoor air temperature (R1T), see the points to the right.	Preliminary preparation ■ Remove the front panel (2) and side panel according to the "Procedure to Remove Outside Panels".
2	Pull out the discharge pipe thermistor after inclining the mounting spring outward.	[Procedure to remove thermistor for outdoor air temperature]
3	Pull out the thermistor for suction pipe 1 and thermistor for suction pipe 2, after inclining the mounting spring outward.	
4	Pull out the subcooling thermistor and thermistor for liquid pipe, after inclining the mounting spring outward.	
5	Pull out the thermistor for heat exchanger after pulling the fixing metal part.	■ When passing the thermistor for outdoor air temperature gain through the outside panel, do it through the hole nearby attached with a yellow color mark.
6	Pull out the thermistor for liquid pipe after inclining the mounting spring outward.	

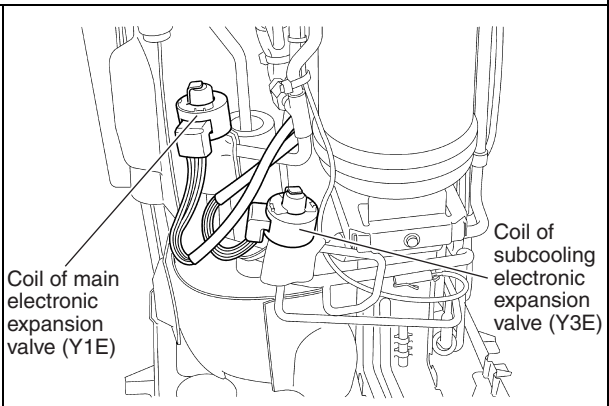
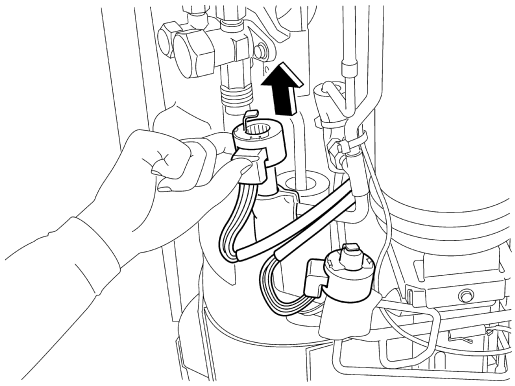
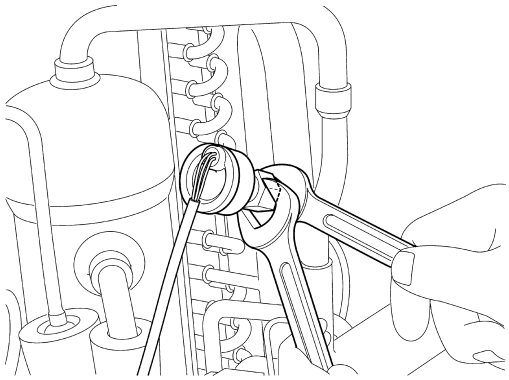
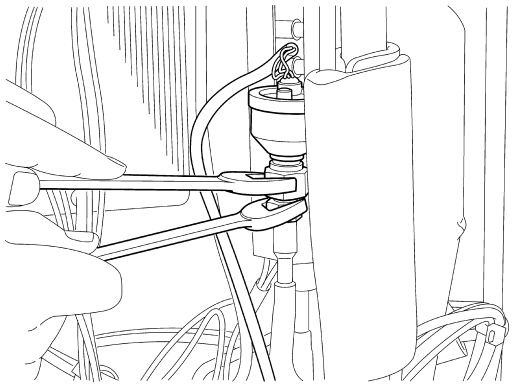


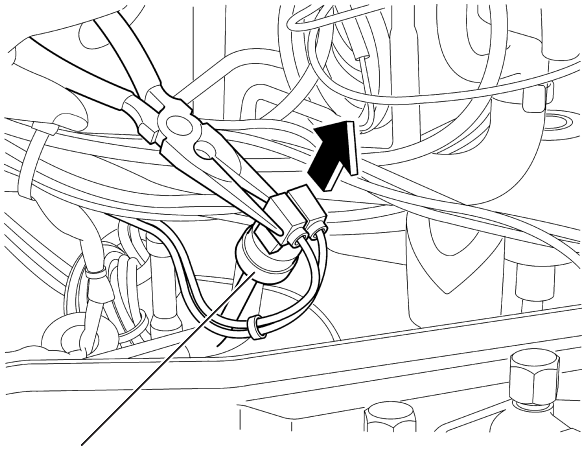
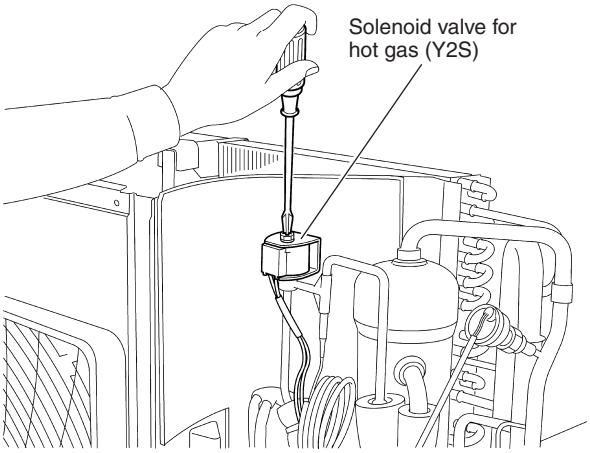
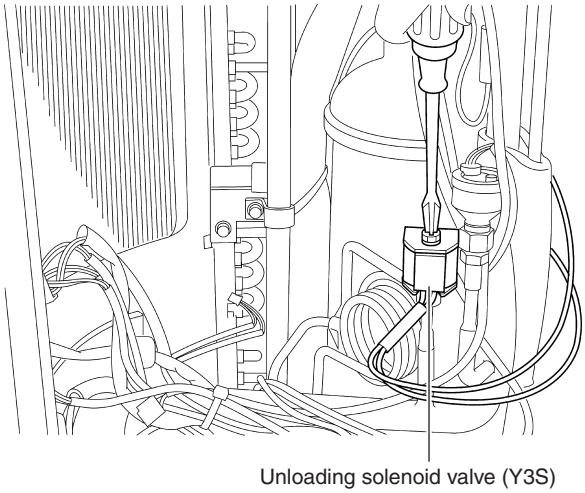


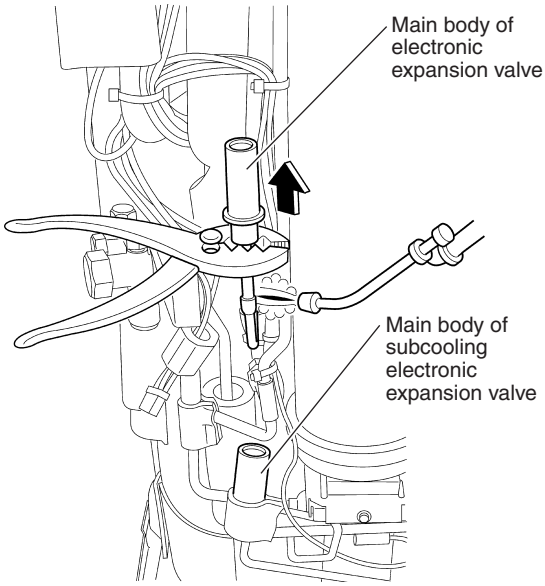
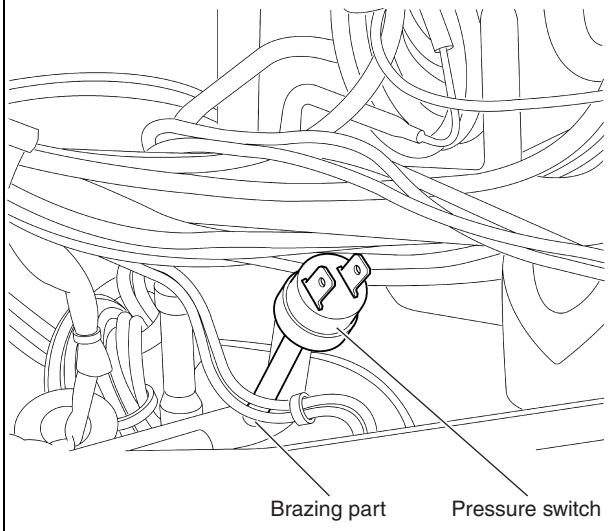
5. Procedure to Remove Electronic Expansion Valve and Peripheral Equipment

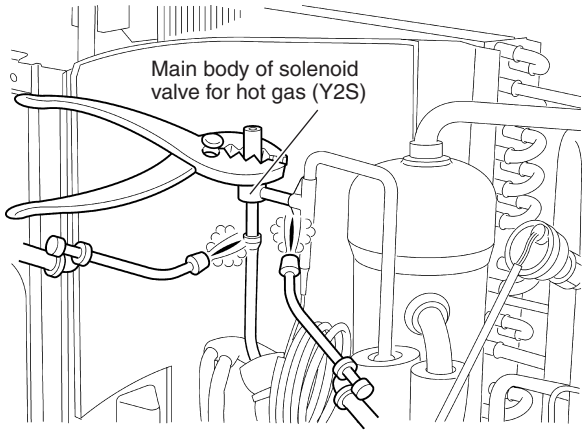
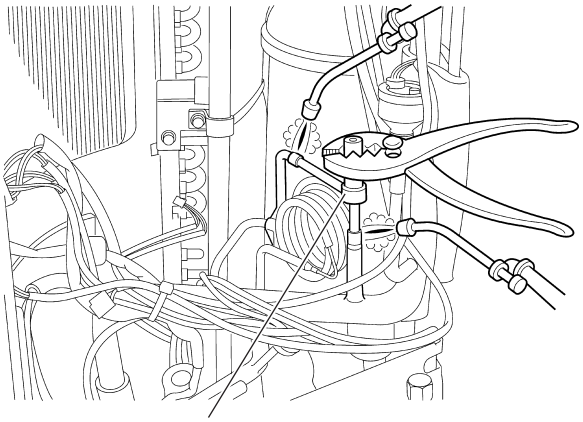
Procedure

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

Step	Procedure		Points
1	Pull out the coils of electronic expansion valve (2 places).	 	
2	Remove the pressure sensors (2 places).	 	■ When removing the sensor, be sure to use 2 spanners as the left figure shows. ■ The pressure sensor is equipped with a gauge joint having a check valve. Therefore, when loosing the fixing nut of sensor, a refrigerant leak is stopped.

Step	Procedure		Points
3	Pull off the lead wire of high pressure switch.		
4	Remove the coil of solenoid valves (2 portions).	 	■ Loosen the fixing bolt above the coil of solenoid valve and then remove the coil.

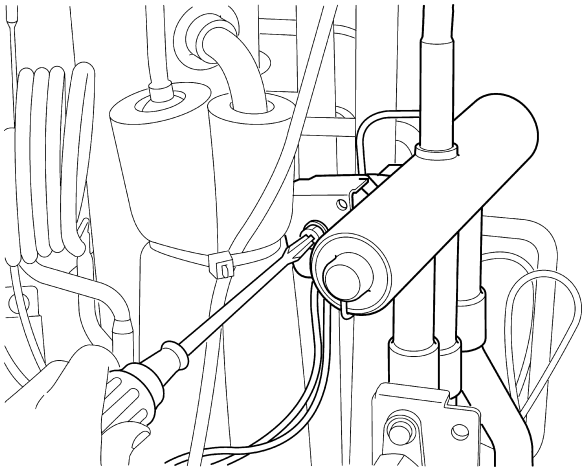
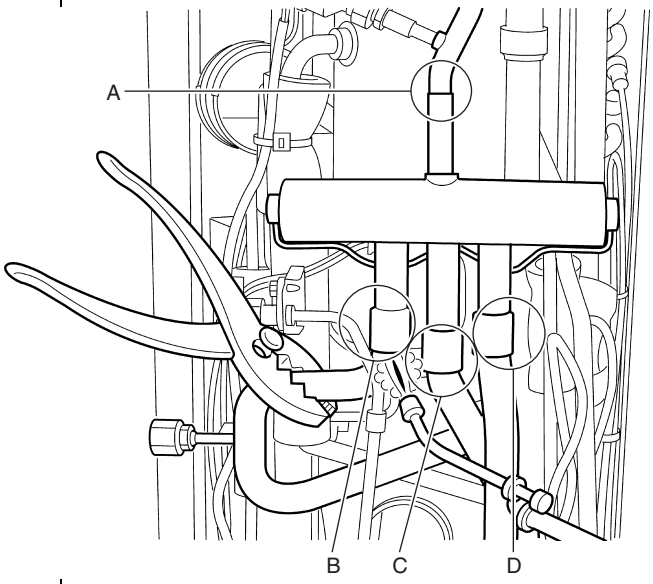
Step	Procedure	Points
■ Make sure that there is no refrigerant gas left within the refrigerant circuit system before performing the operation.		**Warning** If refrigerant gas leaks during operation, ventilate the room. (The exposure of refrigerant gas to a fire causes generates toxic gas.)
5 Disconnect the brazing part of main body at electronic expansion valve at its soldered portion. **Caution** Protect the periphery of the above by welding operation sheets or steel plates, etc. so that flame from a gas welder does not affect surrounding of the electronic expansion valve.		**Caution** Do not suffer burns due to contact with piping etc. heated by a gas welder.
6 Disconnect the brazing part of main body at pressure switch at its soldered portion.		Precautions on mounting ① Mount it by means of the non-oxidation brazing method. If nitrogen gas is not available, quickly operate to mount it. ② It is necessary to prevent the packing from deterioration due to the carbonization of oil or the heat affection within the four way valve. For this purpose, avoid the heating of the valve by wrapping its body with wet cloth and then supplying water to the cloth to keep wet. (Keeping a temperature of 120°C or lower) ■ Be careful not to crash the piping by over-pressing it with a plier when pulling out it. <u>In case it is difficult to cut off by a gas welder and remove it,</u> 1. Remove any point of the piping connections (brazing portions), which is easy to remove or mount. 2. Make it easy to remove it by cutting the piping etc. of the body with a small copper pipe cutter. Note: Never use a metal saw for sure since cut chips may be mixed into the piping.

Step	Procedure		Points
7	Disconnect the brazing part of main body at solenoid valve.	  Main body of unloading solenoid valve (Y3S)	**⚠ Warning** If refrigerant gas leaks during operation, ventilate the room. (The exposure of refrigerant gas to a fire causes generates toxic gas.) **⚠ Caution** Do not suffer burns due to contact with piping etc. heated by a gas welder. Precautions on mounting ① Mount it by means of the non-oxidation brazing method. If nitrogen gas is not available, quickly operate to mount it. ② It is necessary to prevent the packing from deterioration due to the carbonization of oil or the heat affection within the four way valve. For this purpose, avoid the heating of the valve by wrapping its body with wet cloth and then supplying water to the cloth to keep wet. (Keeping a temperature of 120°C or lower) ■ Be careful not to crash the piping by over-pressing it with a plier when pulling out it. <u>In case it is difficult to cut off by a gas welder and remove it.</u> 1. Remove any point of the piping connections (brazing portions), which is easy to remove or mount. 2. Make it easy to remove it by cutting the piping etc. of the body with a small copper pipe cutter. Note: Never use a metal saw for sure since cut chips may be mixed into the piping.

6. Procedure to Remove Four Way Valve

Procedure

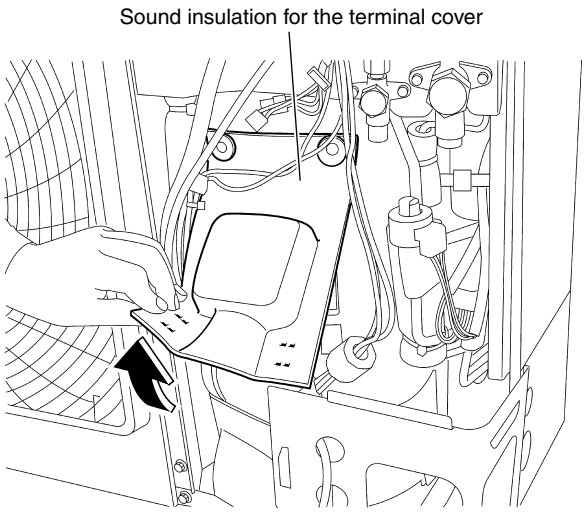
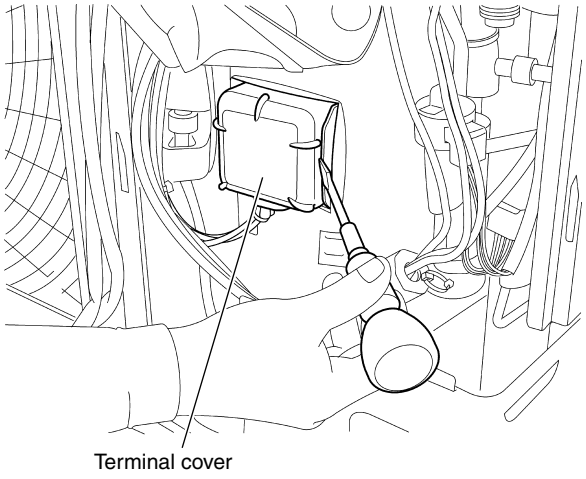
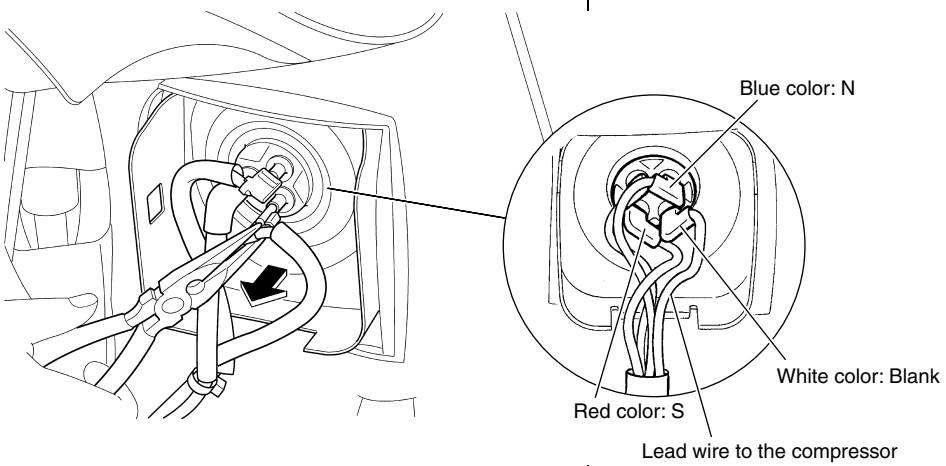
Warning **Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.**

Step	Procedure	Points
■ Make sure that there is no refrigerant gas left in the refrigerant circuit system before performing the operation. ■ Cut off the clamp material of wire harness.		**Warning** If refrigerant gas leaks during operation, ventilate the room. (The exposure of refrigerant gas to a fire causes generates toxic gas.) **Caution** Do not suffer burns due to contact with piping etc. heated by a gas welder.
1 Remove the coil of four way valve.		
2 Disconnect the brazing part of four way valve (4 places) (A, B, C and D).		Precautions on mounting ① Mount it by means of the non-oxidation brazing method. If nitrogen gas is not available, quickly operate to mount it. ② It is necessary to prevent the packing from deterioration due to the carbonization of oil or the heat affection within the four way valve. For this purpose, avoid the heating of the valve by wrapping its body with wet cloth and then supplying water to the cloth to keep wet. (Keeping a temperature of 120°C or lower) ■ Be careful not to crash the piping by over-pressing it with a plier when pulling out it. <u>In case it is difficult to cut off by a gas welder and remove it,</u> 1. Remove any point of the piping connections (brazing portions), which is easy to remove or mount. 2. Make it easy to remove it by cutting the piping etc. of the body with a small copper pipe cutter. Note: Never use a metal saw for sure since cut chips may be mixed into the piping.

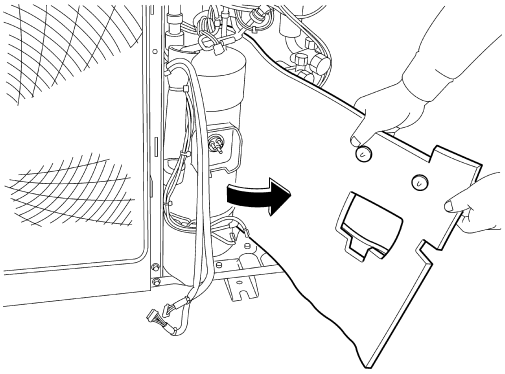
7. Procedure to Remove Compressor

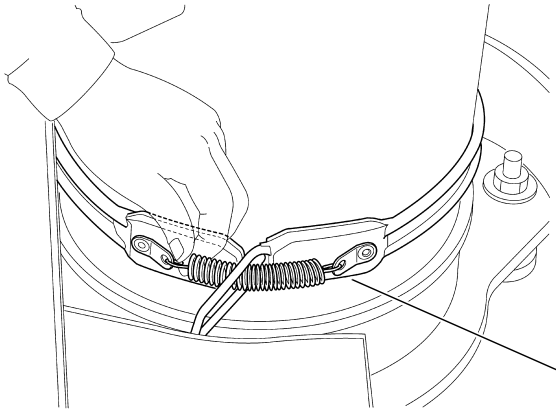
Procedure

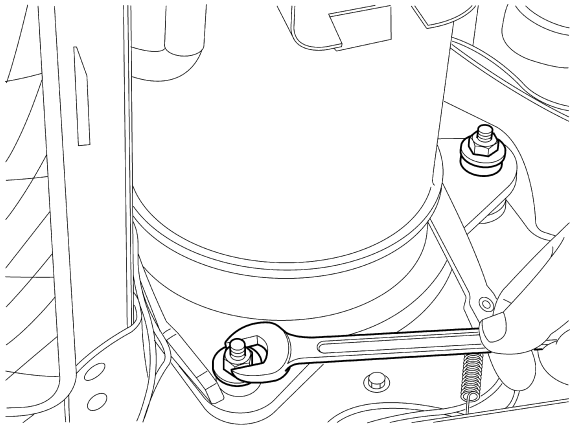
Warning **Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.**

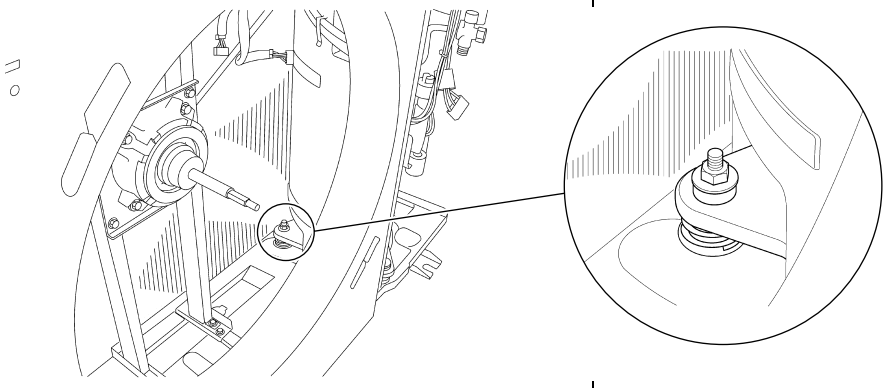
Step	Procedure	Points
■ Remove the outside panels, electrical component, and compressor fixing panel, according to the "Procedure to Remove Outside Panels"		
1. Pull off the lead wire of compressor.		
1 Open upward the sound insulation for the terminal cover. 2 Remove the terminal cover with a minus driver, etc.		
3 Remove the terminals for the compressor with a round nose chain pliers with side cutters, etc.		

Step	Procedure	Points
4	Remove the sound insulation for the compressor.	
5	Remove the crankcase heater under the compressor.	Pull the spring to trip the catch.
6	Remove the 3 fixing bolts of the compressor.	■ You can see the far side fixing bolts when the bottom discharge grill is removed. Remove the bolt (s) in view first.

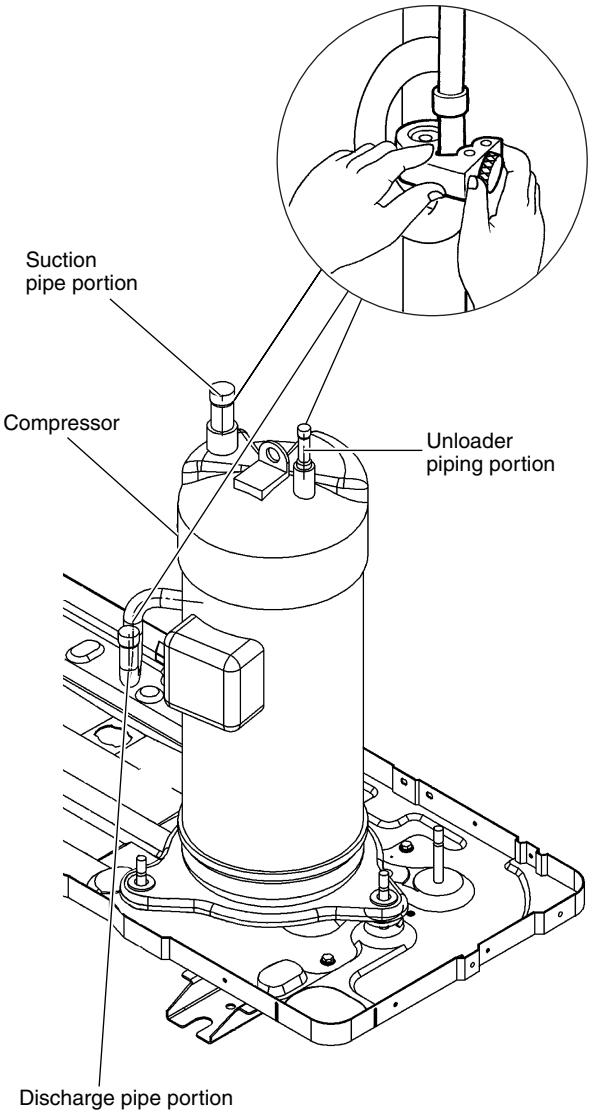








Step	Procedure	Points
■ Make sure that there is no refrigerant gas left within the refrigerant circuit system before performing the operation		■ The cutting part is in the compressor side relative to the brazing part. ■ Preliminarily cut off with a gas welder, a part of the piping from the end side to the soldered portion, which have remained after being cut using a pipe cutter, before replacing with a new compressor.
7	Cut off the suction pipe, discharge pipe and unloader pipe of compressor with a pipe cutter (3 places).	



⚠ Warning

Refrigerant oil in the compressor may catch fire, so prepare wet cloth so as to extinguish a fire rapidly.

⚠ Warning

If refrigerant gas leaks during operation, ventilate the room. (The exposure of refrigerant gas to a fire causes generates toxic gas.)

⚠ Caution

Do not suffer burns due to contact with piping etc. heated by a gas welder.

Revision History

Month / Year	Version	Revised contents
08/2012	Si341211	First edition

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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