DAIKIN

Si00-872

REMOVAL PROCEDURE

SERVICE MANUAL

SERVICE MANUAL

2.0/2.5/3.5 kW Class

- Outdoor Unit
- Inverter
- Pair Type

Service Manual
Removal Procedure

Outdoor Unit

●Cooling Only

RKS20G2V1B
RKS25G2V1B
RKS35G2V1B

●Heat Pump

ARXG25E3V1B RXG25E3V1B
ARXG35E3V1B RXG35E3V1B

ARXS20G2V1B RXS20G2V1B
ARXS25G2V1B RXS25G2V1B
ARXS35G2V1B RXS35G2V1B

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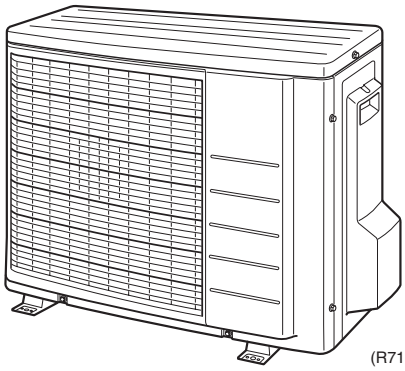
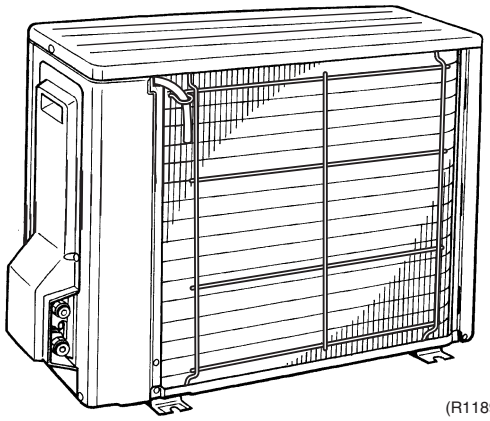
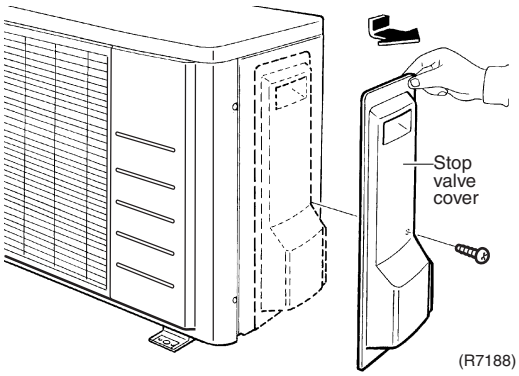
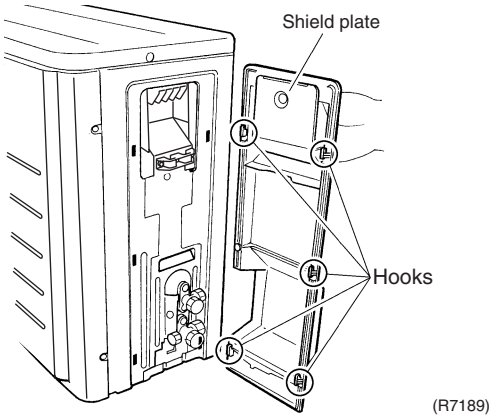
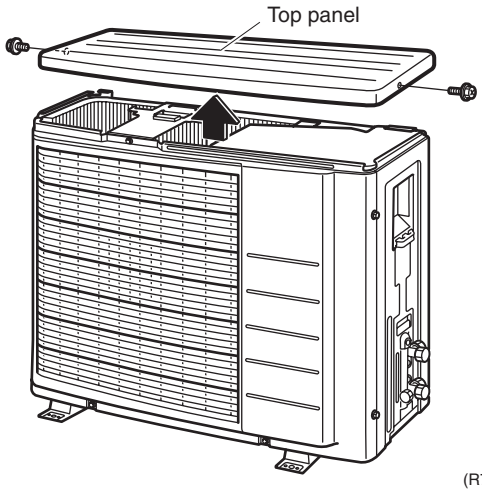
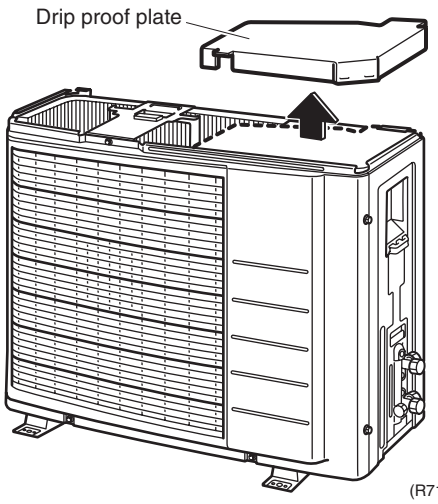
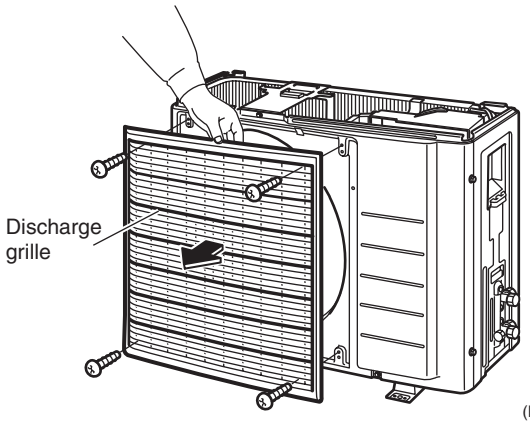
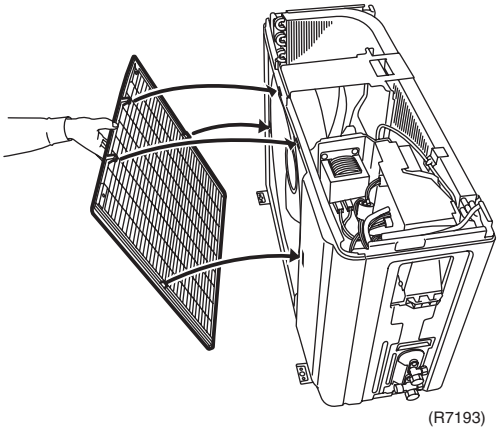
Note:
- The illustrations may be slightly different depending on the model.
- The illustrations are for heat pump models as representative.

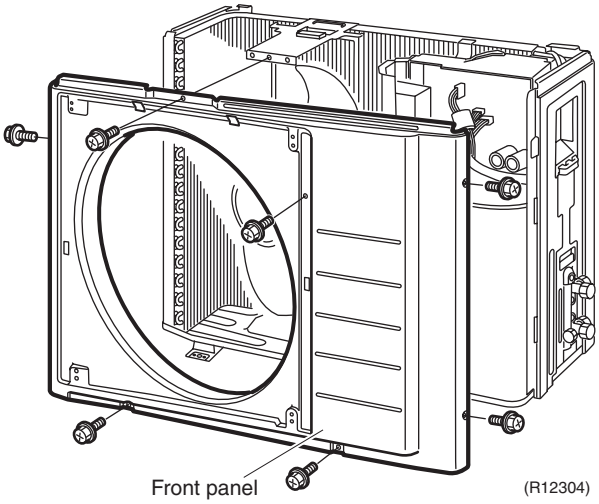
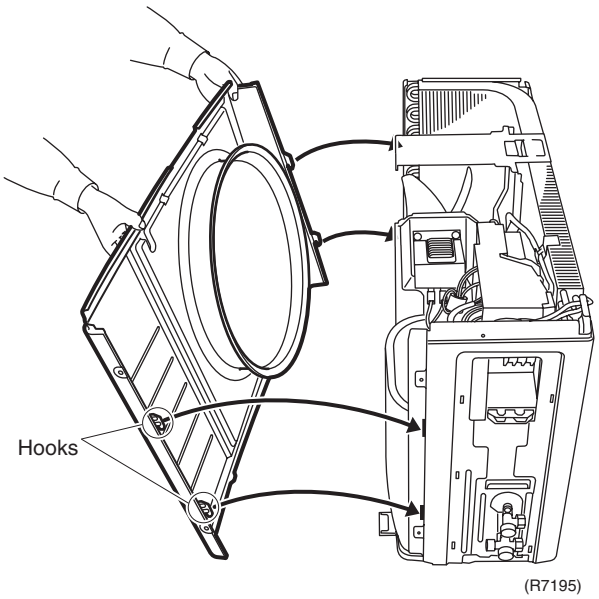
1. Removal of Outer Panels / Fan Motor

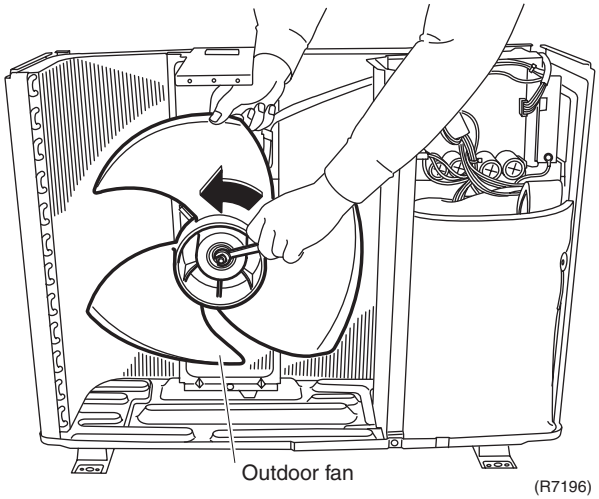
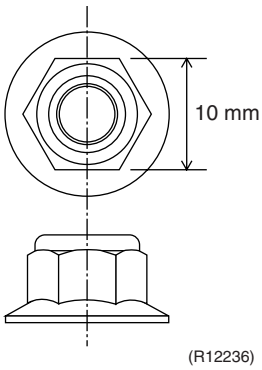
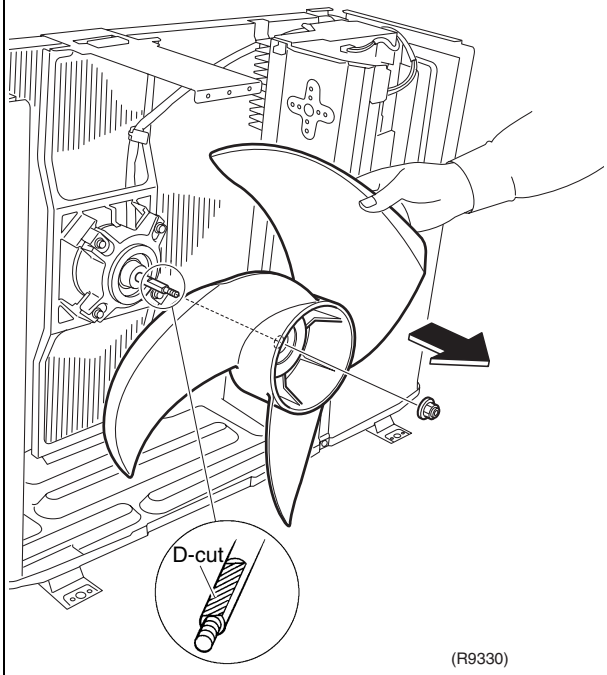
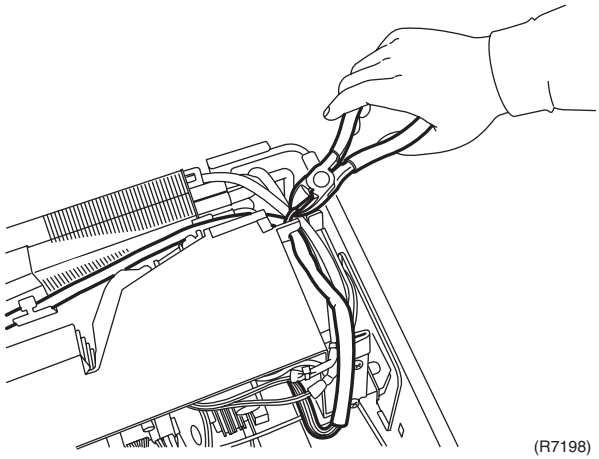
Procedure

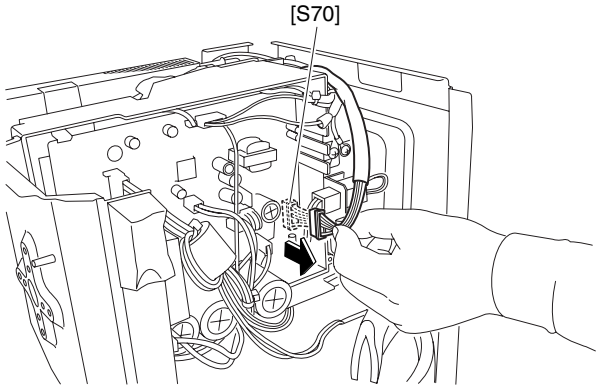
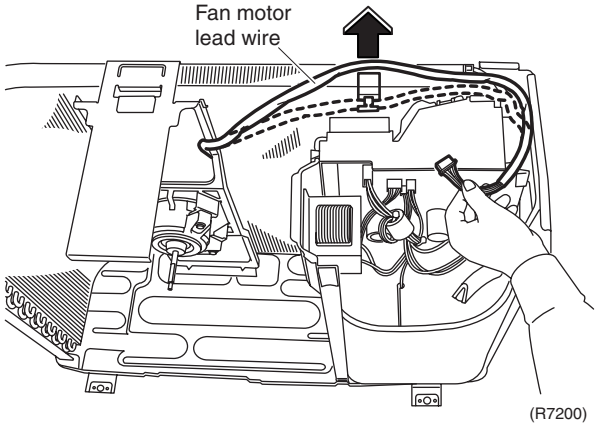
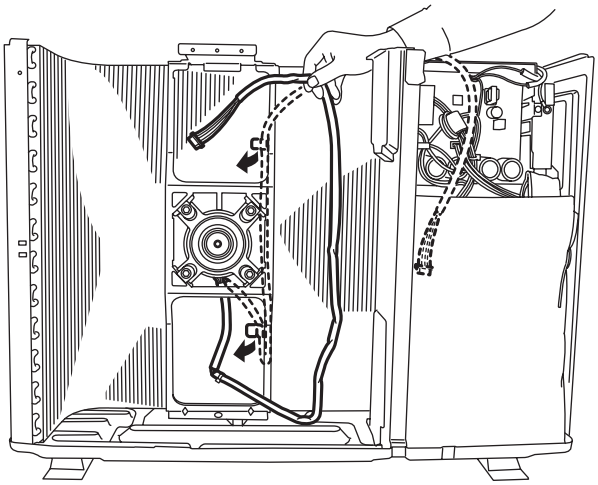
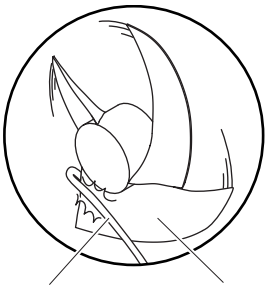
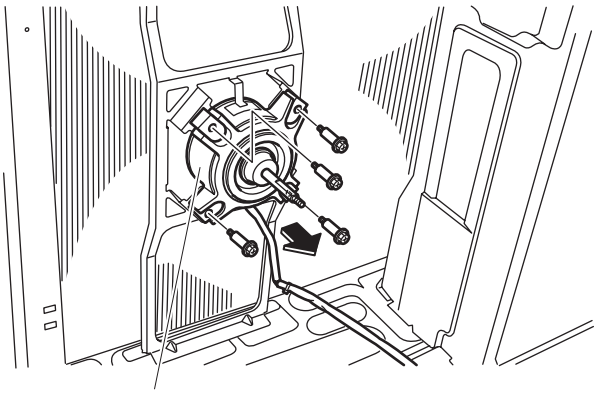
Warning **Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.**

Step	Procedure	Points
1. Features	 (R7186)  (R11890)	■ Some models do not have a guard net. ■ Take care not to cut your finger by the fins of the outdoor heat exchanger.
2. Remove the panels. 1 Remove the screw of the stop valve cover. Pull down the stop valve cover and remove it.	 (R7188)  (R7189)	■ The stop valve cover is united with the shield plate. ■ When reassembling, make sure to fit the 5 hooks.

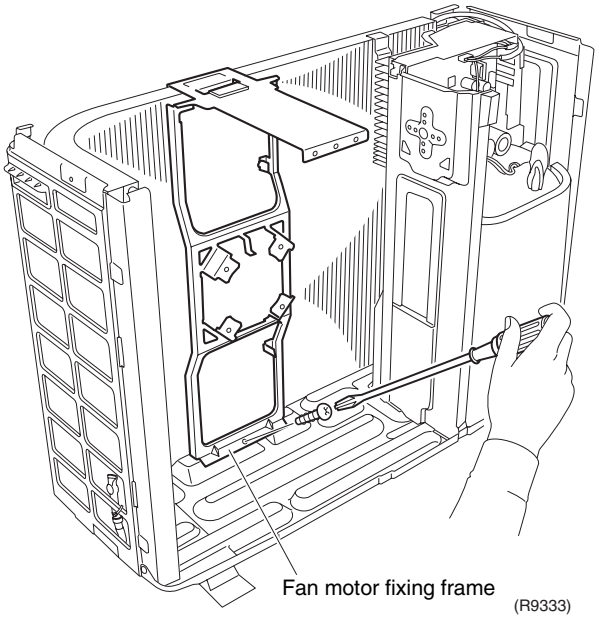
Step	Procedure		Points
2	Remove the 2 screws and lift the top panel.	 (R7190)	
3	Remove the drip proof plate.	 (R7191)	
4	Remove the 4 screws and remove the discharge grille.	 (R7192)  (R7193)	■ The discharge grille has 4 hooks.

Step	Procedure		Points
5	Remove the 7 screws of the front panel.		
6	Unfasten the hooks. Pull and remove the front panel.		■ The front panel has 4 hooks.

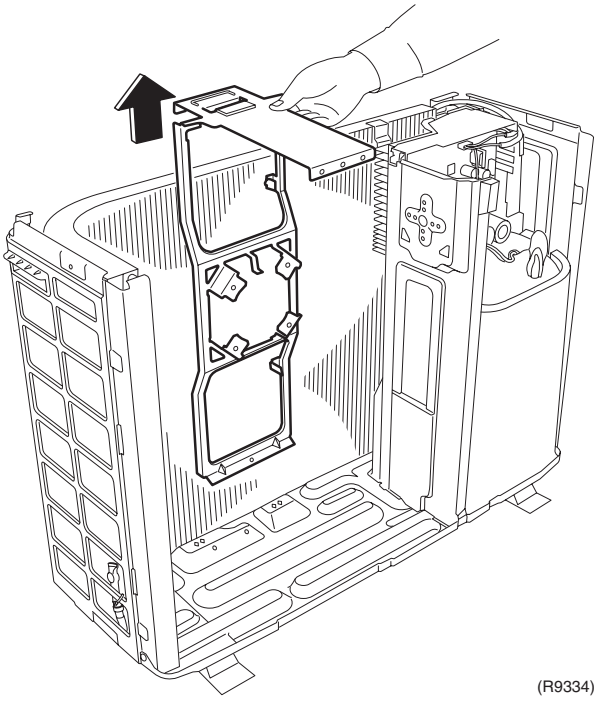
Step	Procedure	Points
3. Remove the fan motor.		■ Nut size: M6
1 Remove the washer-fitted nut of the outdoor fan.	 (R7196)	 (R12236)
2 Remove the outdoor fan.	 (R9330)	■ When reassembling, align the ▼ mark of the outdoor fan with the D-cut section of the motor shaft.
3 Cut the clamp.	 (R7198)	

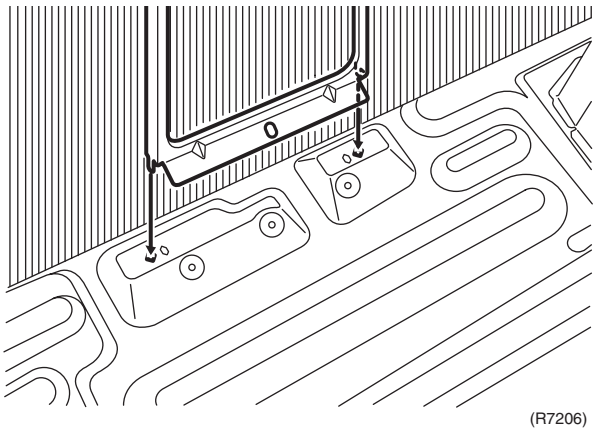
Step	Procedure		Points
4	Disconnect the connector for the fan motor [S70].	 (R9332)	
5	Release the fan motor lead wire from the hook.	 (R7200)	
6	Open the hooks and release the fan motor lead wire.	 (R7201)	■ When reassembling, put the fan motor lead wire through the back of the fan motor (so as not to be entangled with the outdoor fan).  (R3249)
7	Remove the 4 screws and remove the fan motor.	 (R7202)	■ Be sure to remove the lower screws first. If the upper screws are removed first, the fan motor, the center of gravity of which is toward the front, may tilt down or fall, getting you injured.

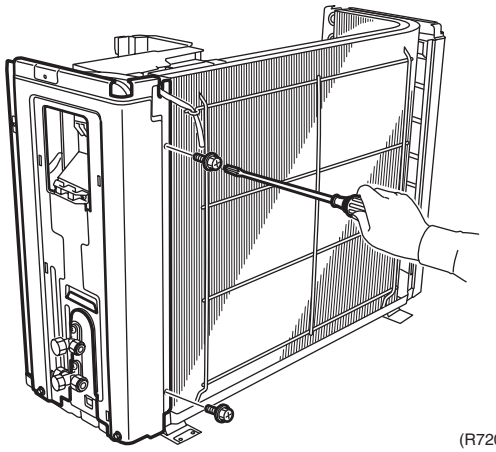
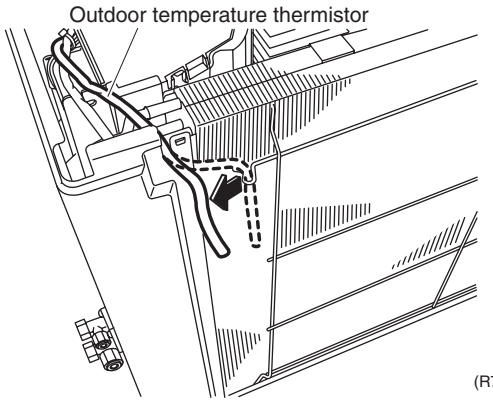
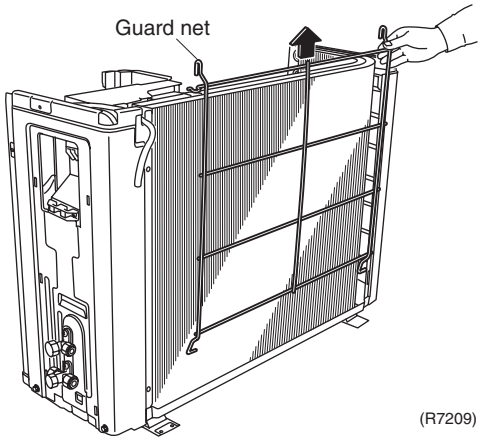
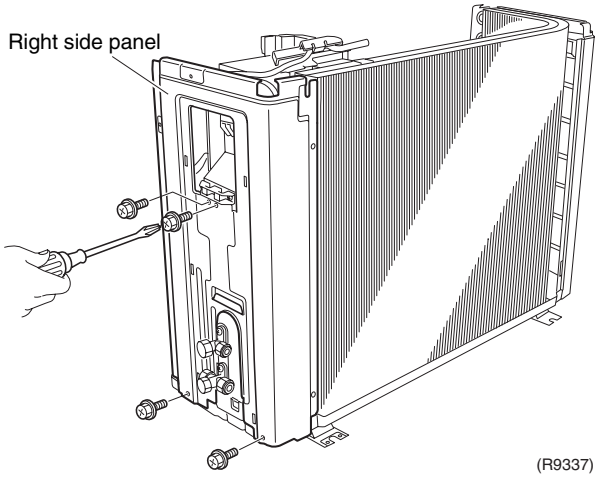
Step	Procedure	Points
8	Remove the screw and remove the fan motor fixing frame.	■ When reassembling, fit the lower hooks into the bottom frame.

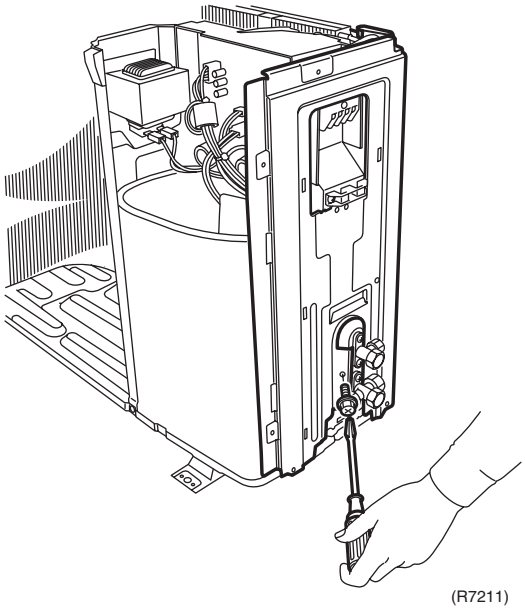
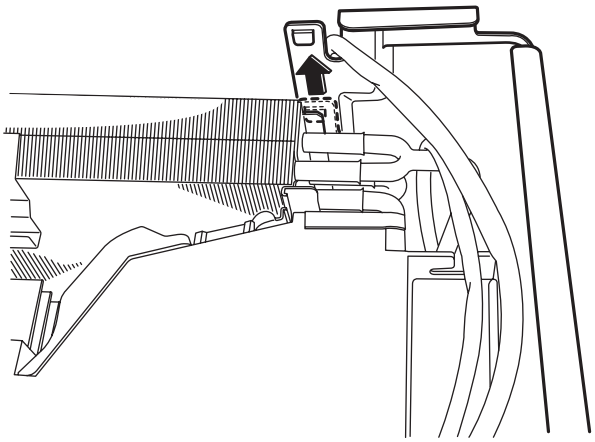
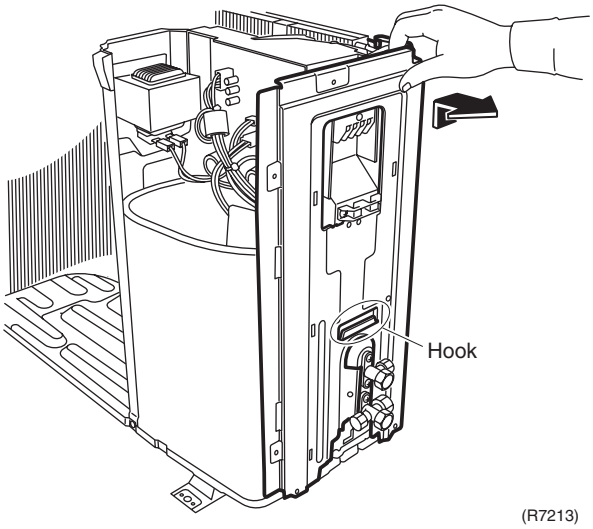


(R9333)


(R9334)


(R7206)

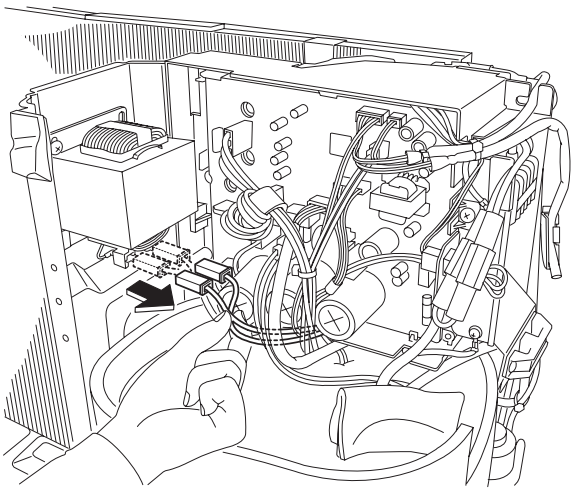
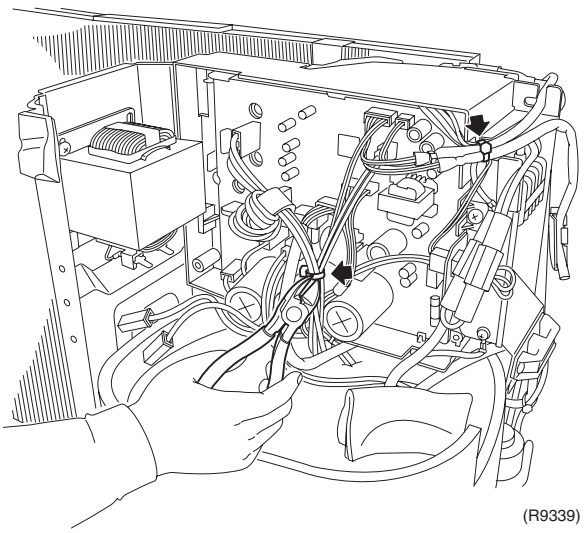
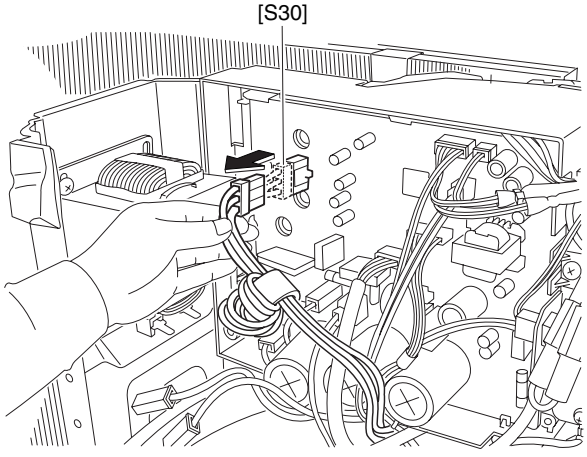
Step	Procedure	Points
4. Remove the right side panel.		
1 Remove the 2 screws on the rear side.	 (R7207)	
2 Release the outdoor temperature thermistor.	 (R7208)	
3 Lift up the guard net and remove it.	 (R7209)	
4 Remove the 4 screws on the right side panel.	 (R9337)	

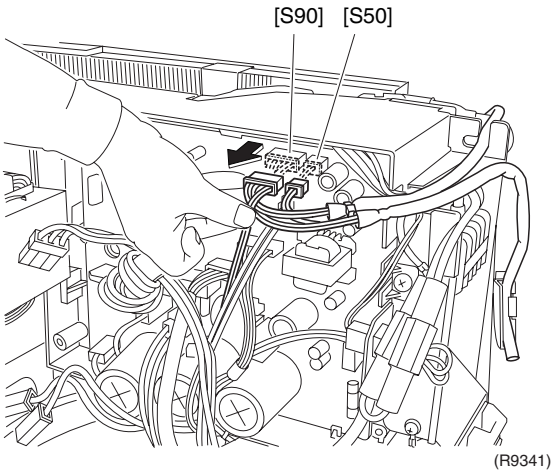
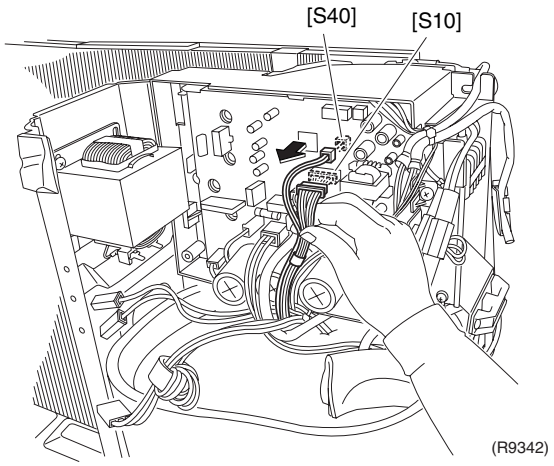
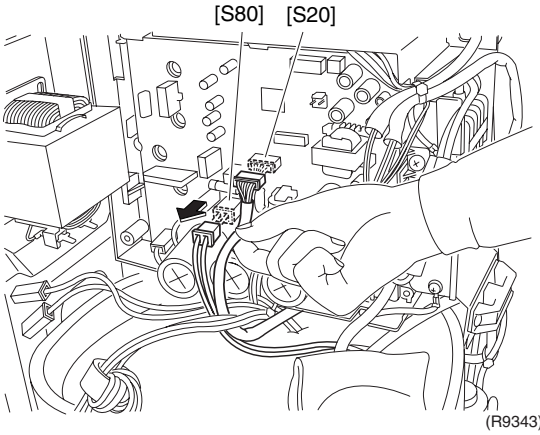
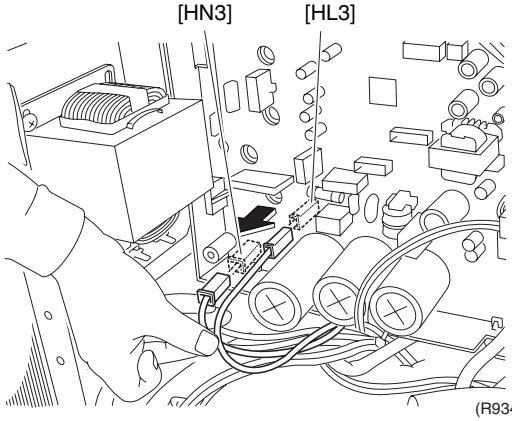
Step	Procedure		Points
5	Remove the screw near the stop valves.	 (R7211)	
6	Unfasten the hook on the rear side.	 (R7212)	■ When reassembling, make sure to fit the hook.
7	Lift up the right side panel and remove it.	 (R7213)	■ When reassembling, make sure to fit the hook.

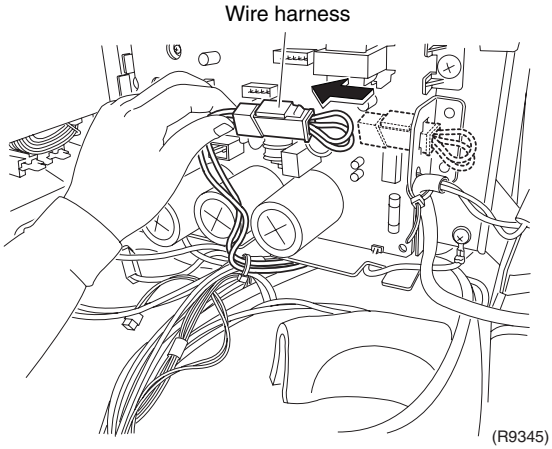
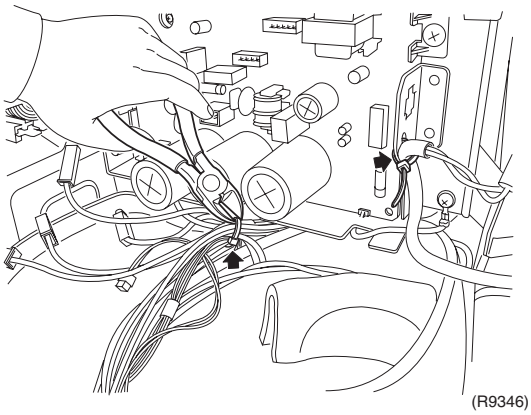
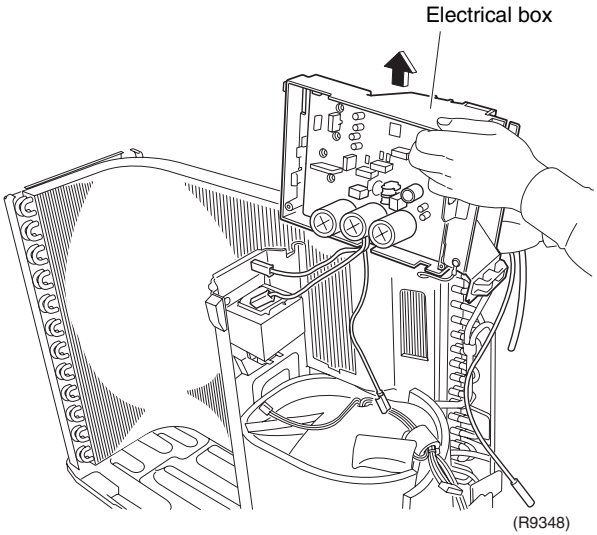
2. Removal of Electrical Box

Procedure

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

Step	Procedure		Points
1	Disconnect the 2 connectors for the reactor.	 (R9338)	**Preparation** ■ Remove the panels and disconnect the connector for the fan motor according to the “Removal of Outer Panels / Fan Motor”.
2	Cut the clamps at 2 locations.	 (R9339)	
3	Disconnect the connector for the compressor [S30].	[S30]  (R9340)	■ When reassembling, coil the excessive lead wire and hang the loop on the hook.

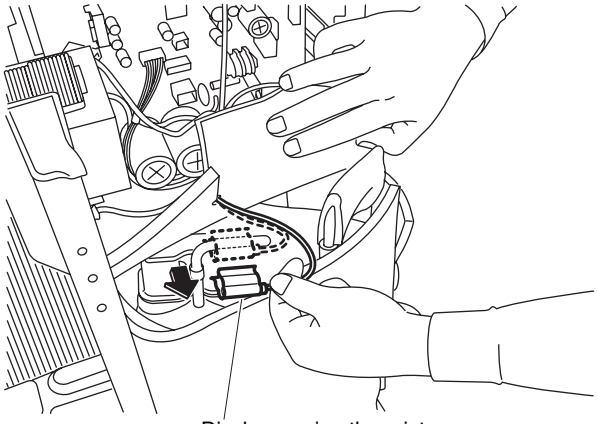
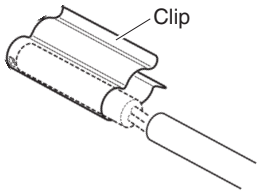
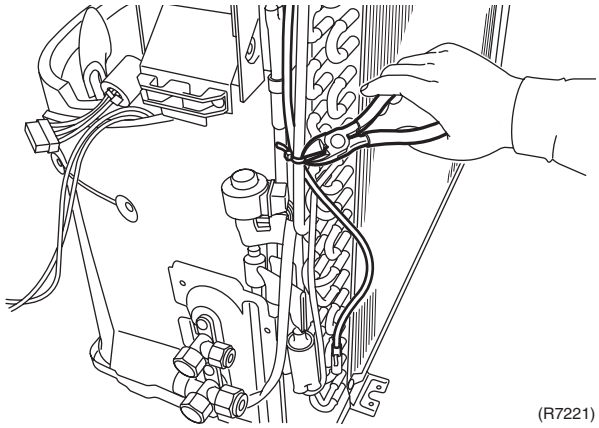
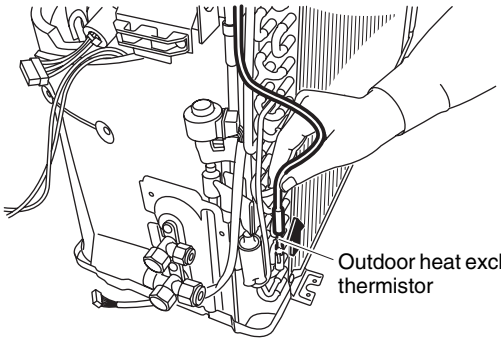
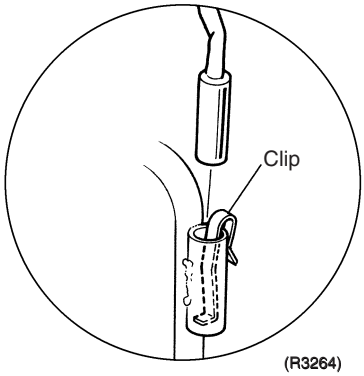
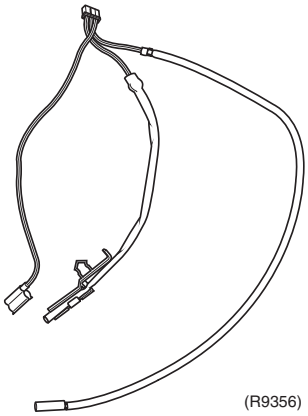
Step	Procedure		Points
4	Disconnect the connectors for the magnetic relay [S50] and for the thermistors [S90].	 (R9341)	
5	Disconnect the connectors for the filter PCB [S10] and for the overload protector [S40].	 (R9342)	
6	Disconnect the connectors for the electronic expansion valve coil [S20] and for the four way valve coil [S80].	 (R9343)	■ The cooling only models do not have the harness for [S80].
7	Disconnect the connectors for the filter PCB [HL3] [HN3].	 (R9344)	

Step	Procedure		Points
8	Remove the wire harness for standby electricity saving.	 (R9345)	■ Some models do not have the harness for standby electricity saving.
9	Cut the clamps at 2 locations.	 (R9346)	
10	Lift and remove the electrical box.	 (R9348)	

3. Removal of Thermistors

Procedure

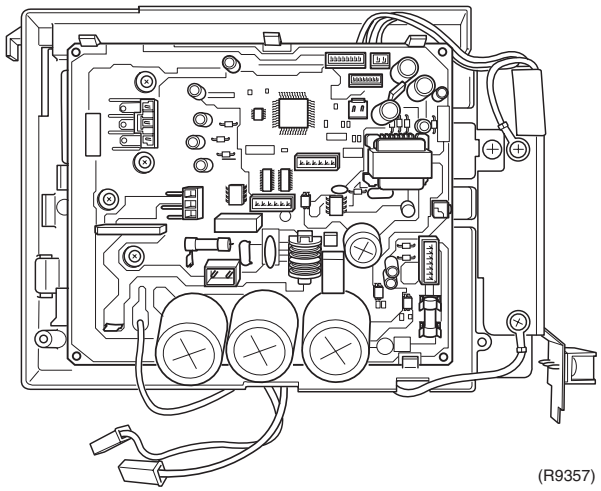
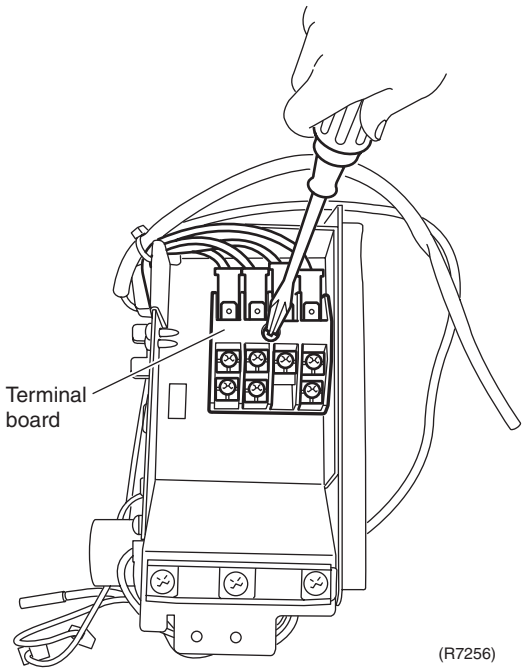
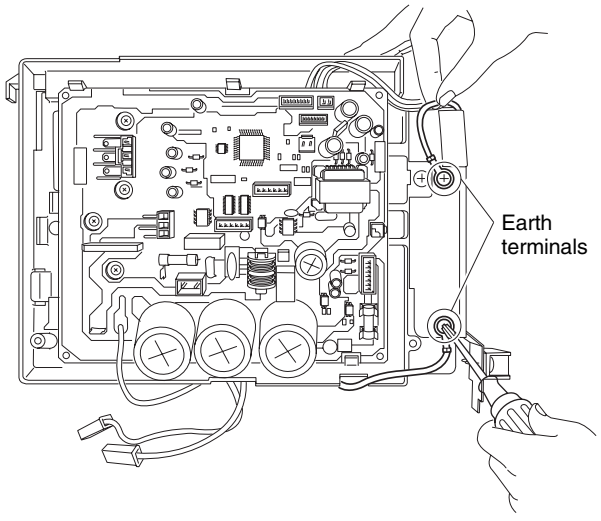
Warning **Be sure to wait 10 minutes or more after turning off all power supplies before disassembling work.**

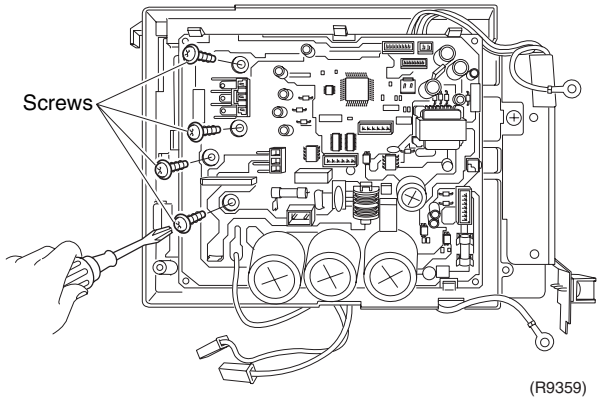
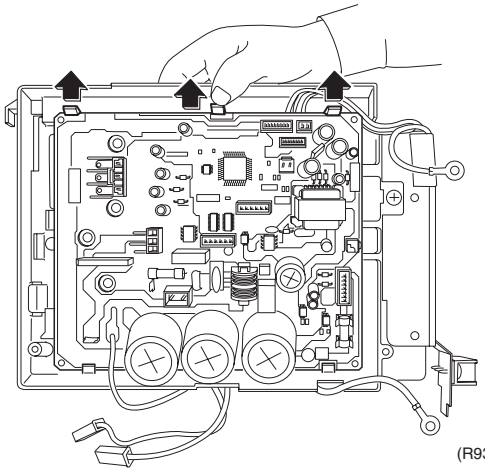
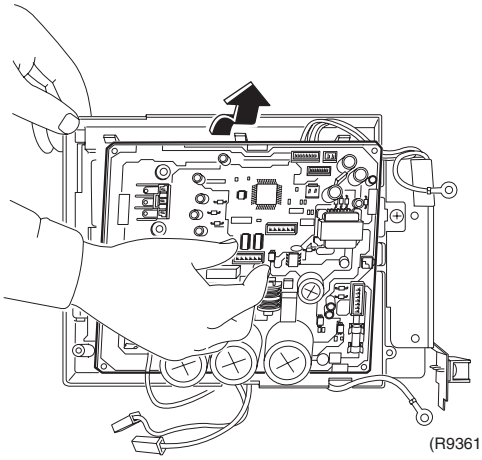
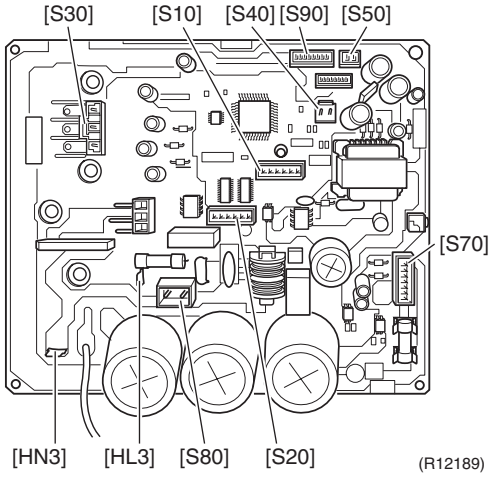
Step	Procedure		Points
1	Release the discharge pipe thermistor.	 (R0267)	■ Be careful not to lose the clip for the thermistor.  (R12279)
2	Cut the clamp.	 (R7221)	
3	Pull out the outdoor heat exchanger thermistor.	 (R7222)	■ Be careful not to lose the clip for the thermistor.  (R3264)
4	Feature of the thermistors	 (R9356)	

4. Removal of PCB

Procedure

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

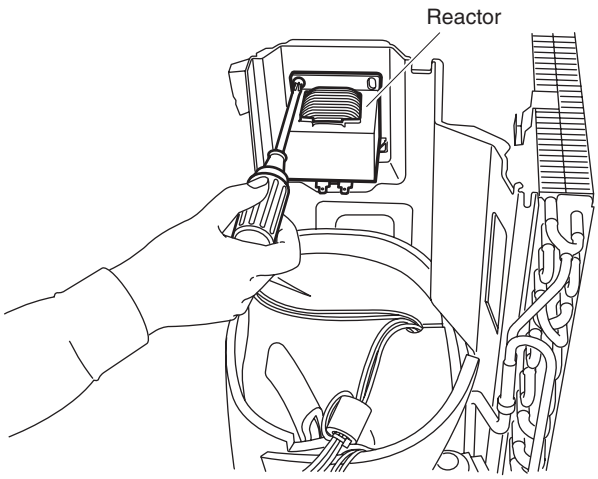
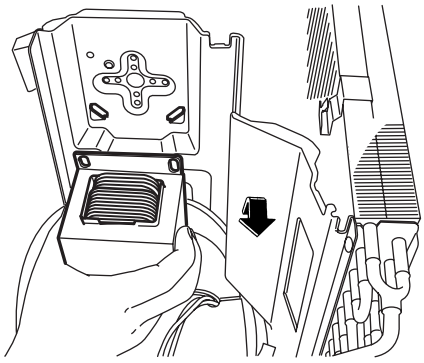
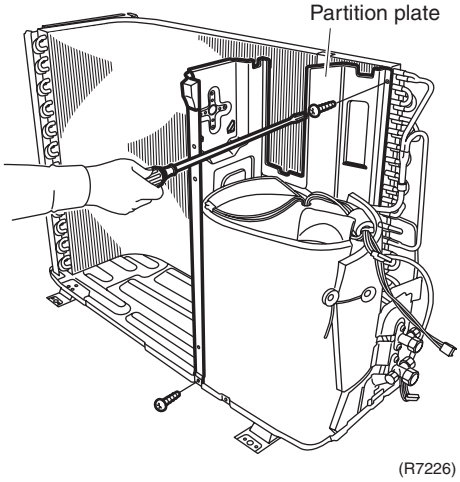
Step	Procedure		Points
1	Feature of the main PCB	 (R9357)	■ You can remove the main PCB when you disconnect the lead wires on the terminal board without removing the electrical box.
2	Remove the screw on the terminal board.	 (R7256)	
3	Release the 2 earth terminals.	 (R9358)	

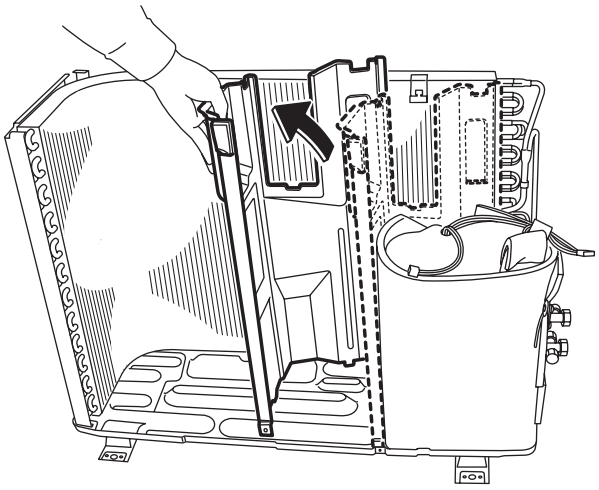
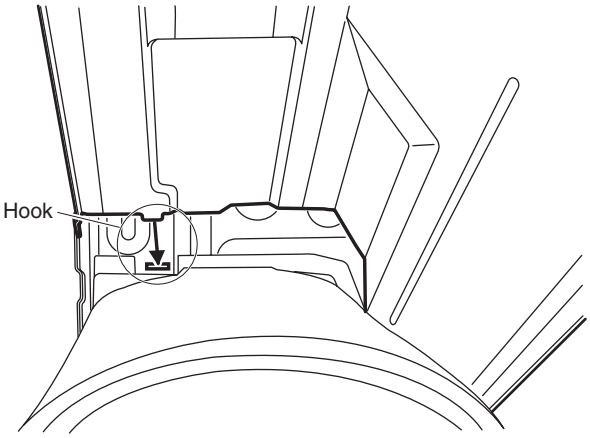
Step	Procedure		Points
4	Remove the 4 screws.	 (R9359)	
5	Unfasten the 3 hooks on the upper side.	 (R9360)	
6	Lift and pull out the main PCB.	 (R9361)	
7	Feature of the main PCB	 (R12189)	[S10] [HL3] [HN3]: filter PCB [S20]: electronic expansion valve coil [S30]: compressor [S40]: overload protector [S50]: magnetic relay [S70]: fan motor [S80]: four way valve coil [S90]: thermistors

5. Removal of Reactor / Partition Plate

Procedure

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

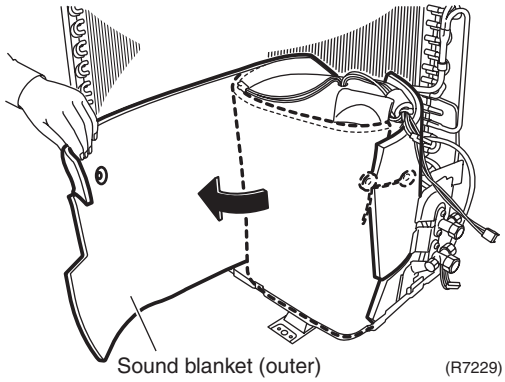
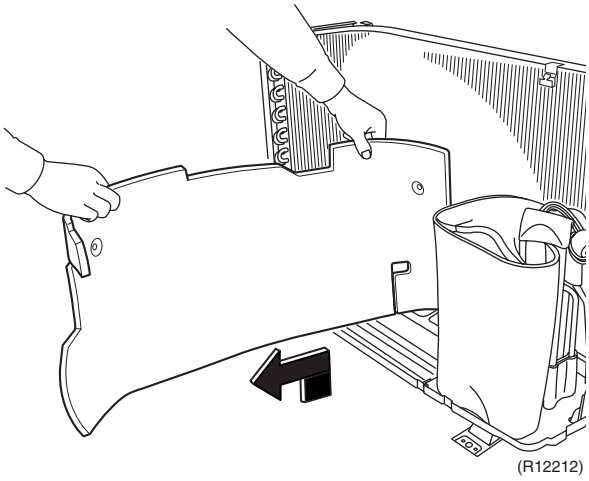
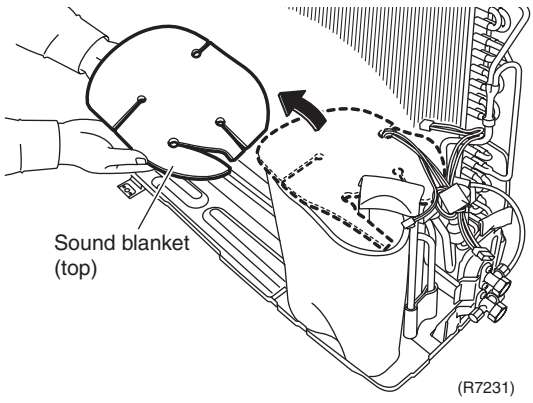
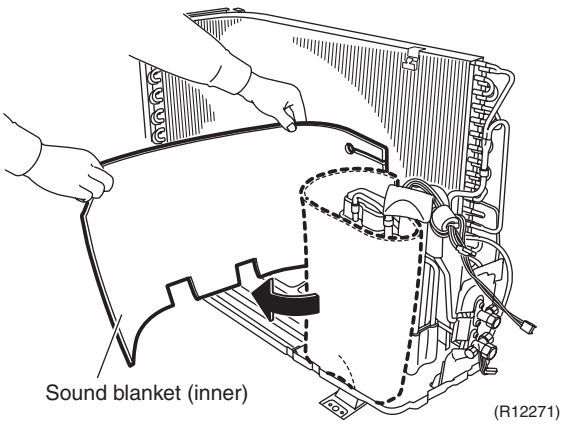
Step	Procedure	Points
1. Remove the reactor.	 (R7224)  (R7225)	**Preparation** ■ Remove the outer panels according to the “Removal of Outer Panels / Fan Motor”. ■ Remove the electrical box according to the "Removal of Electrical Box".
1 Remove the screw and remove the reactor.		
2. Remove the partition plate.	 (R7226)	
1 Remove the 2 screws.		

Step	Procedure		Points
2	The partition plate has a hook on the lower side. Lift and pull the partition plate to remove.	 (R7227)  (R7228)	■ When reassembling, fit the lower hook into the bottom frame.

6. Removal of Sound Blankets

Procedure

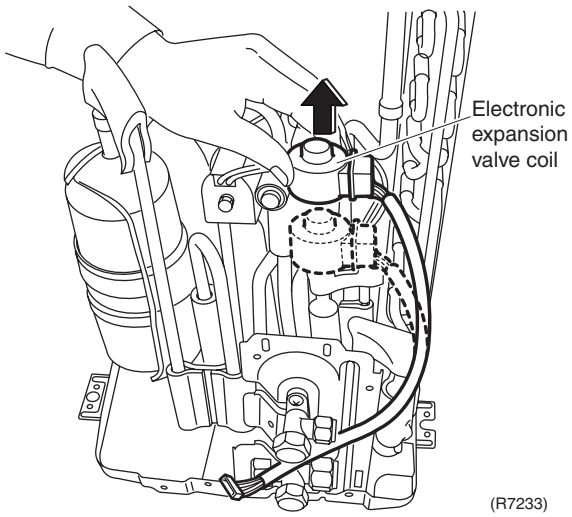
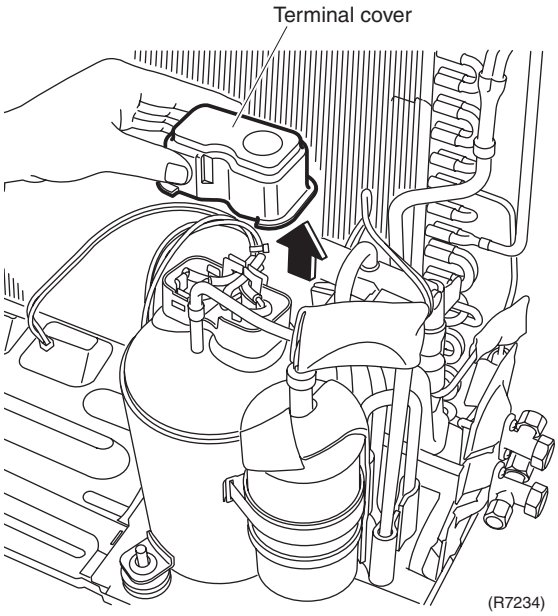
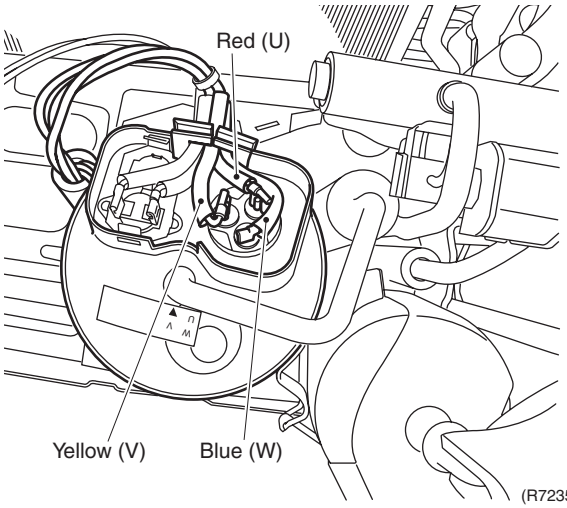
Warning **Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.**

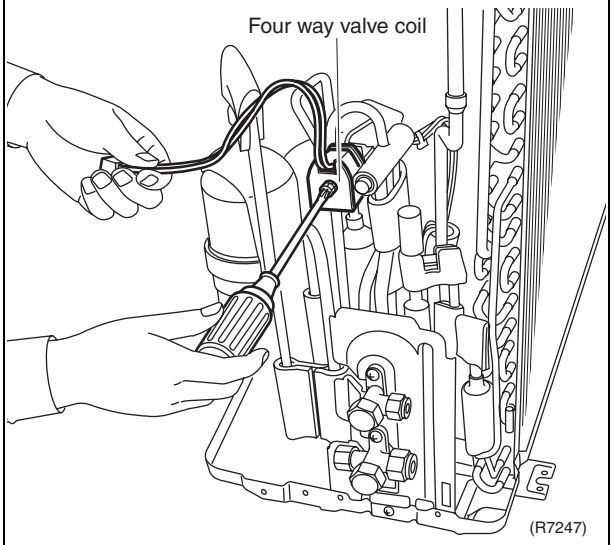
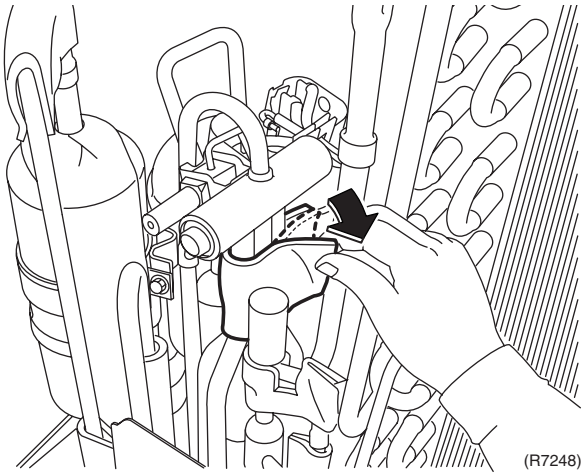
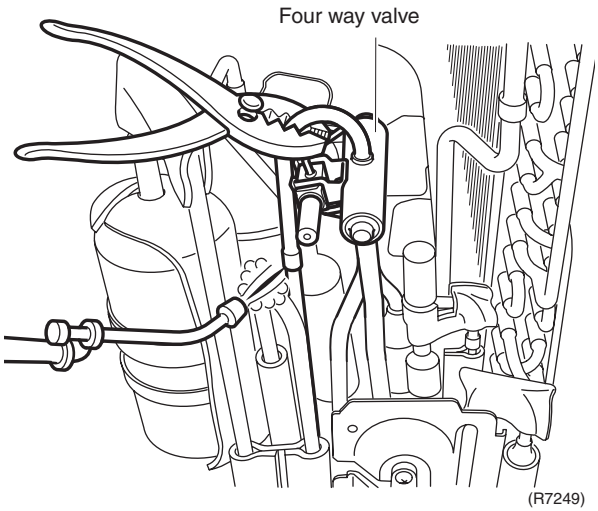
Step	Procedure		Points
1	Untie the string and open the sound blanket (outer).		**Preparation** ■ Remove the outer panels according to the “Removal of Outer Panels / Fan Motor”. ■ Remove the electrical box according to the "Removal of Electrical Box". ■ The design of the sound blankets varies depending on the model.
2	Lift and remove the sound blanket (outer).		■ Since the piping ports are torn easily, remove the sound blanket carefully.
3	Remove the sound blanket (top).		
4	Pull the sound blanket (inner) out.		

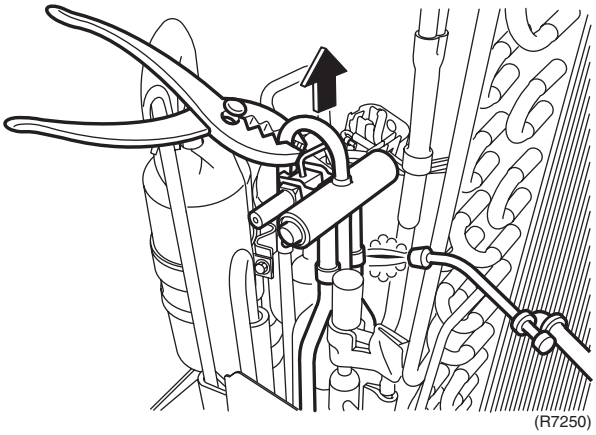
7. Removal of Four Way Valve

Procedure

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

Step	Procedure		Points
1	Pull out the electronic expansion valve coil.	 (R7233)	■ The cooling only models do not have a four way valve.
2	Remove the terminal cover.	 (R7234)	
3	Disconnect the lead wires of the compressor.	 (R7235)	

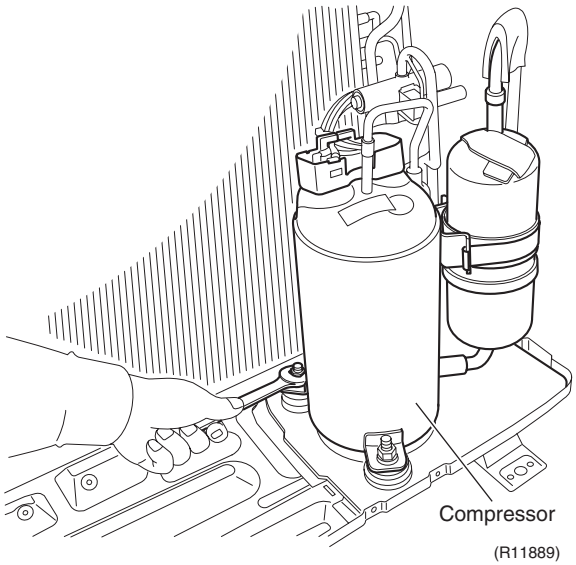
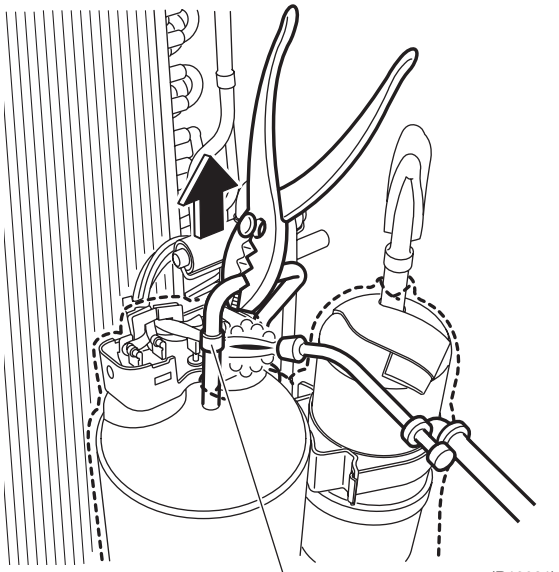
Step	Procedure		Points
4	Remove the screw and remove the four way valve coil.	 (R7247)	**Warning** **Be careful not to get yourself burnt with the pipes and other parts that are heated by the gas brazing machine.** **Warning** **If the refrigerant gas leaks during work, ventilate the room. (If the refrigerant 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** 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.
5	Remove the sheets of putty.	 (R7248)	
■ 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.		 (R7249)	
6	Heat up the brazed part and withdraw the piping with pliers.		

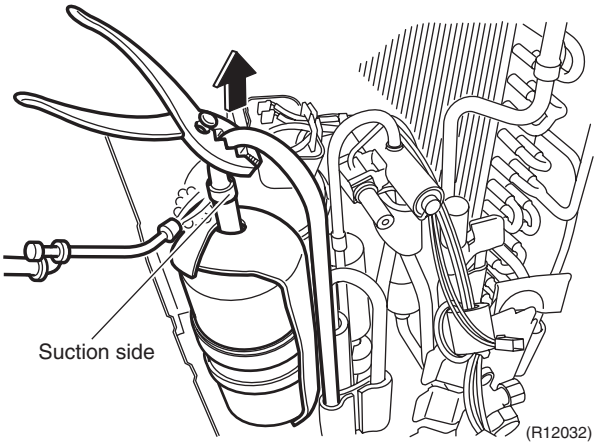
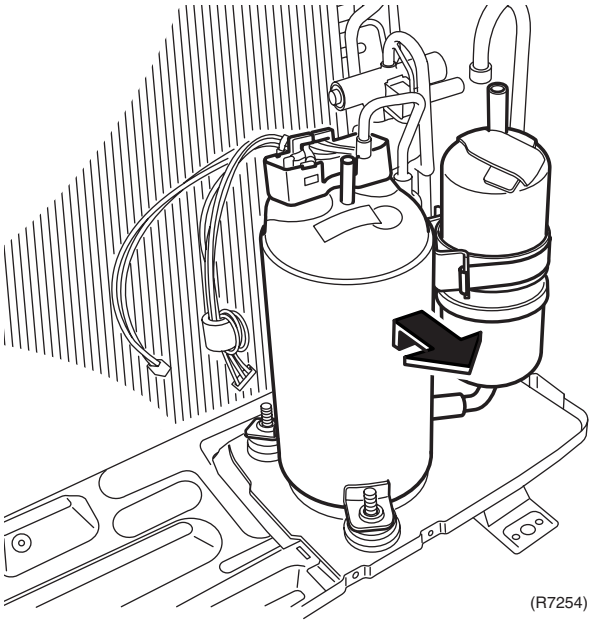
Step	Procedure		Points
		 (R7250)	**Note:** ■ Do not use a metal saw for cutting pipes by all means because the sawdust comes into the circuit. ■ When withdrawing the pipes, be careful not to pinch them firmly with pliers. The pipes may get deformed. ■ Provide a protective sheet or a steel plate so that the brazing flame cannot influence peripheries.

8. Removal of Compressor

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 nuts of the compressor.	 (R11889)	⚠ **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** 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.
	■ Before working, make sure that the refrigerant is empty in the circuit. ■ Be sure to apply nitrogen replacement when heating up the brazed part.		
2	Heat up the brazed part of the discharge side and disconnect.	 (R12031)	

Step	Procedure		Points
3	Heat up the brazed part of the suction side and disconnect.	 (R12032)	**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.
4	Lift the compressor up and remove it.	 (R7254)	

Revision History

Month / Year	Version	Revised contents
06 / 2013	Si00-872	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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