






Si121558EA

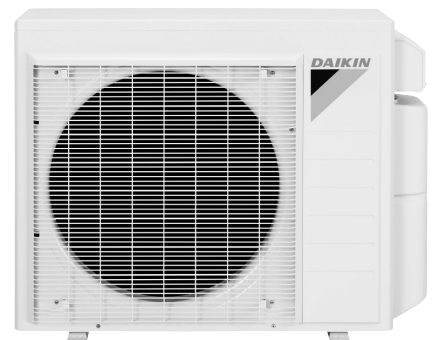
REMOVAL PROCEDURE



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

18000/24000/36000 Btu/h Class

-  Outdoor Unit
-  Inverter
-  Multi Type



Service Manual Removal Procedure

Outdoor Unit

●Heat Pump

2MXS18NMVJU

3MXS24NMVJU

4MXS36NMVJU

2MXL18QMVJU

3MXL24QMVJU

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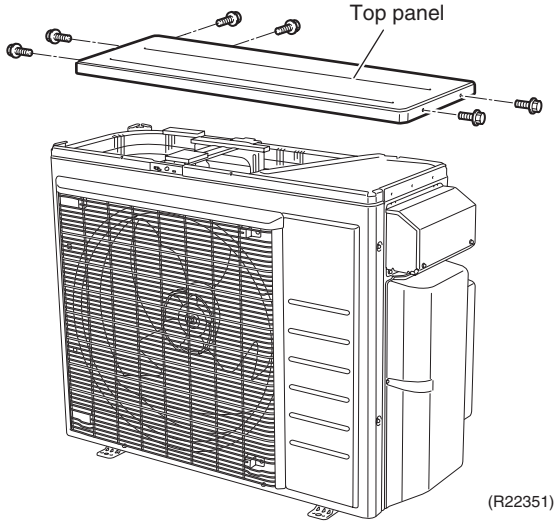
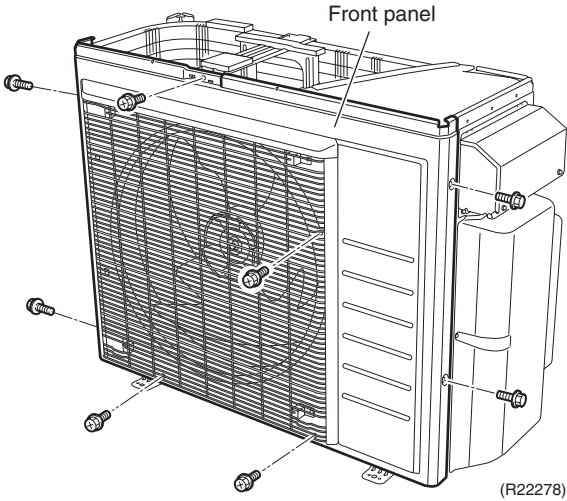
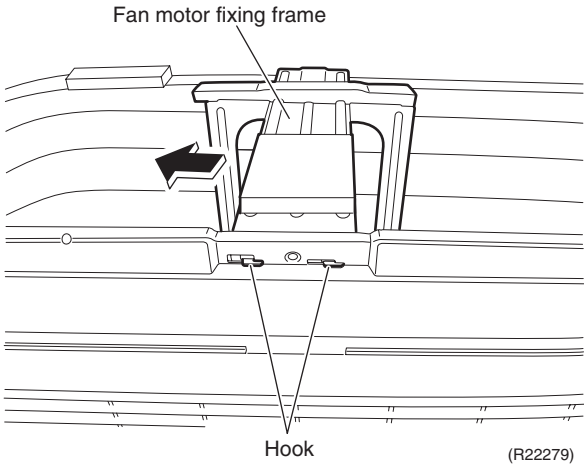
Note: ♦ The illustrations may be slightly different depending on the model.

1. Outer Panels

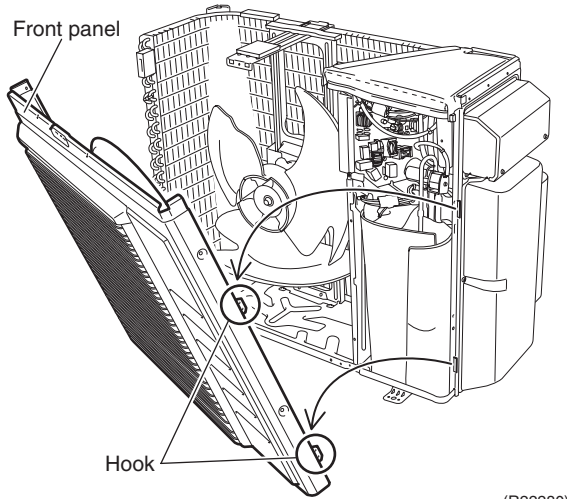


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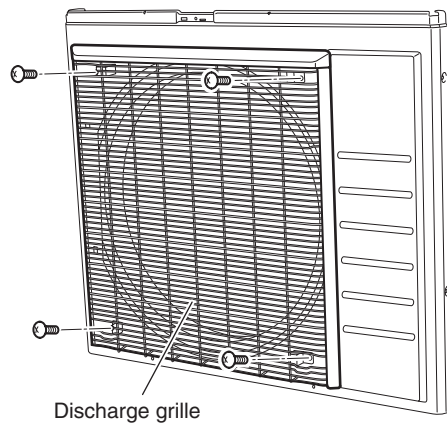
♦ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

Step	Procedure	Points
1	Remove the 6 screws and remove the top panel.	
2	Remove the 8 screws of the front panel.	
3	Slide the fan motor fixing frame to the left and unfasten the 2 hooks.	

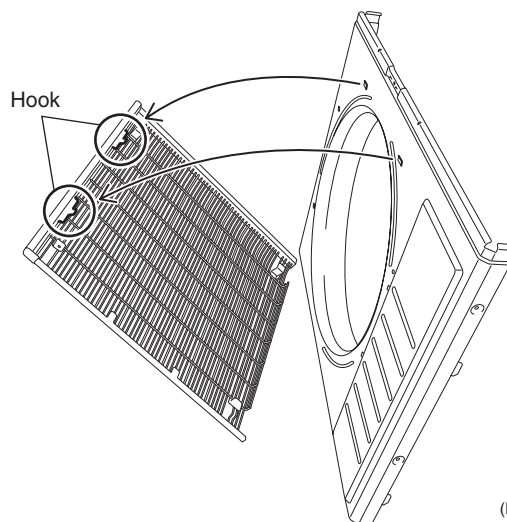
Step	Procedure	Points
4	Unfasten the 2 hooks on the right side.	<ul style="list-style-type: none"> ■ When reassembling, make sure that the 2 hooks are securely fastened.
5	Remove the front panel.	
6	Remove the 4 screws of the discharge grille.	<ul style="list-style-type: none"> ■ When reassembling, make sure that the 2 hooks are securely fastened.
7	Unfasten the 2 hooks and remove the discharge grille.	



(R22280)



(R22281)



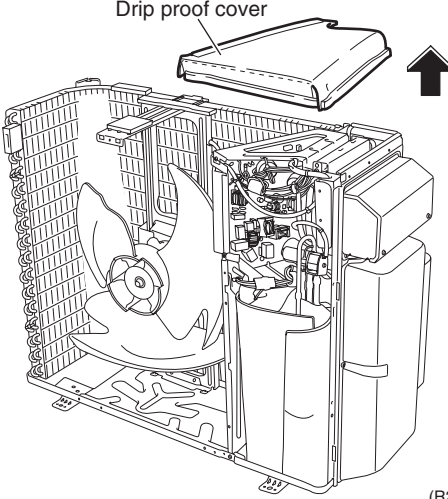
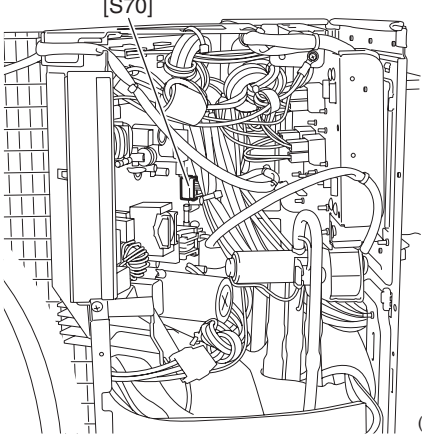
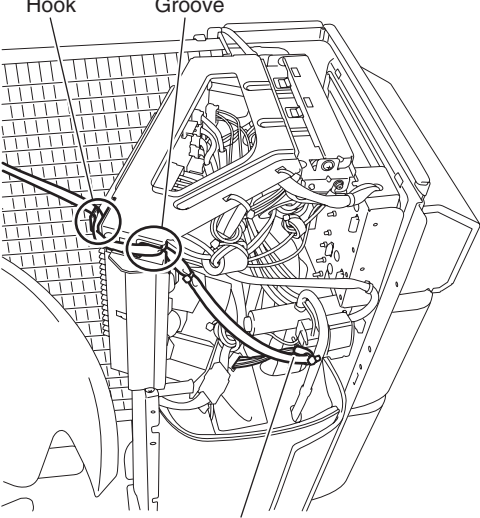
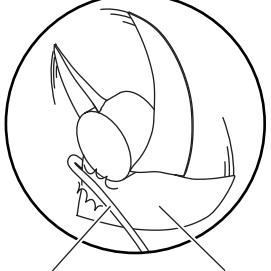
(R22282)

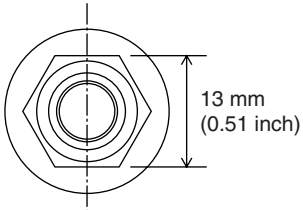
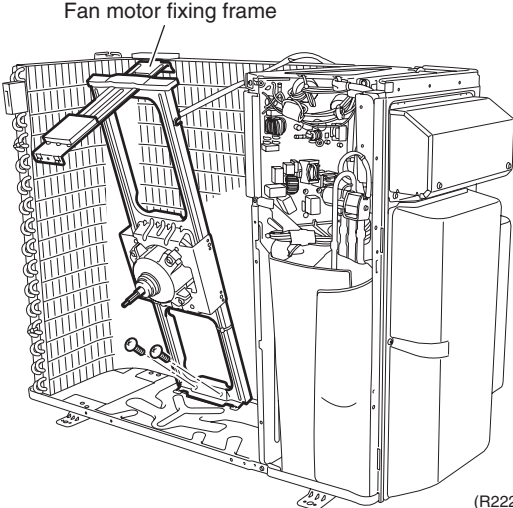
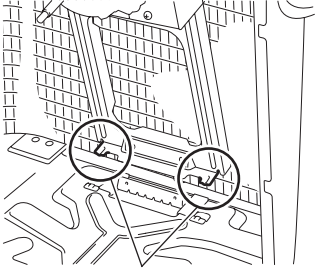
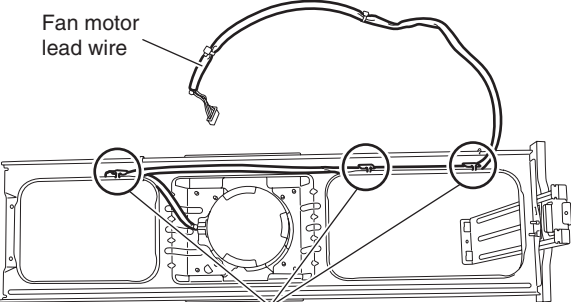
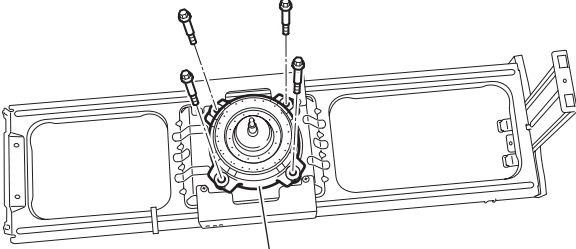
2. Outdoor Fan / Fan Motor



Warning

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

Step	Procedure	Procedure	Points
1	Remove the drip proof cover.	 <p style="text-align: center;">Drip proof cover</p> <p style="text-align: right;">(R22283)</p>	
2	Disconnect the connector [S70].	 <p style="text-align: center;">[S70]</p> <p style="text-align: right;">(R22284)</p>	<p>[S70]: fan motor</p> <ul style="list-style-type: none"> ■ 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.
3	Release the fan motor lead wire from the groove and the hook.	 <p style="text-align: center;">Hook Groove</p> <p style="text-align: center;">Fan motor lead wire</p> <p style="text-align: right;">(R22285)</p>	 <p style="text-align: center;">Lead wire Outdoor fan</p> <p style="text-align: right;">(R3249)</p>

Step	Procedure	Points
4	Remove the nut and remove the outdoor fan.	<p>■ Nut size: M8</p>  <p>(R18965)</p> <p>■ When reassembling, align the ▼ mark of the fan rotor with the D-cut section of the motor shaft.</p>
5	Remove the 2 screws and remove the fan motor fixing frame.	<p>■ When reassembling, fit the 2 lower hooks into the bottom frame.</p>  <p>(R22287)</p>  <p>(R20916)</p>
6	Unfasten the 3 hooks on the fan motor fixing frame and release the fan motor lead wire.	 <p>(R22288)</p>
7	Remove the 4 screws and remove the fan motor.	 <p>(R22289)</p>

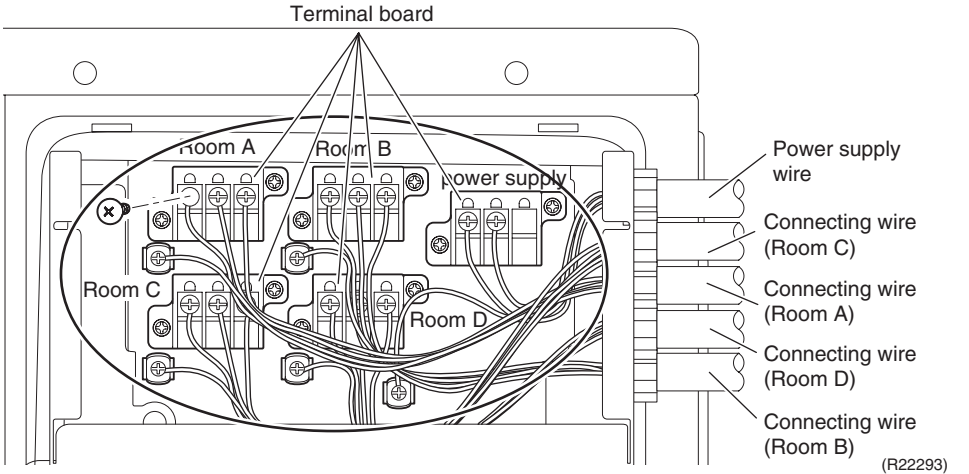
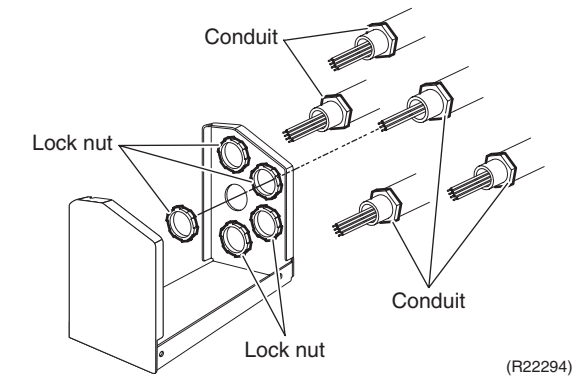
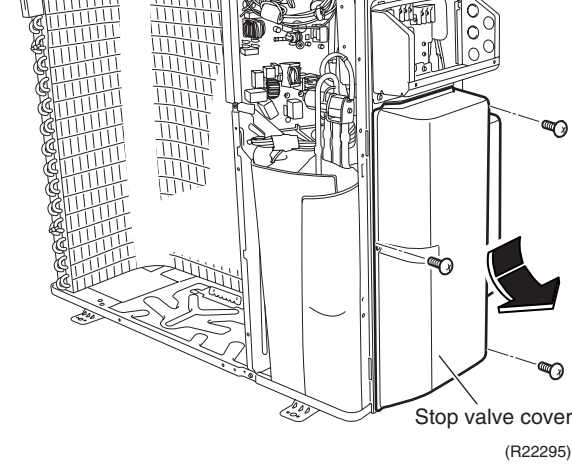
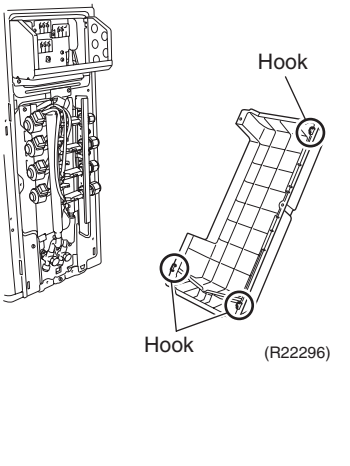
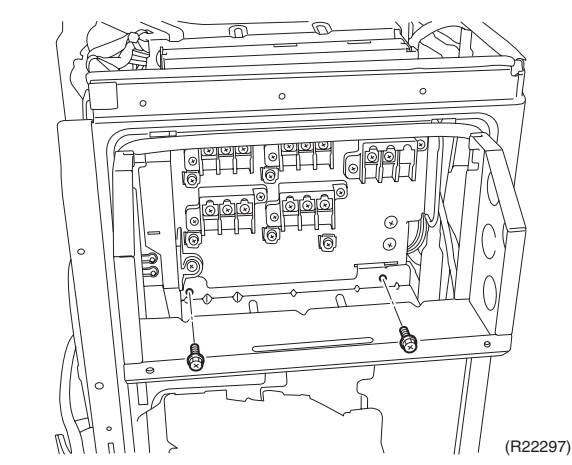
3. Right Side Panel / Electrical Box

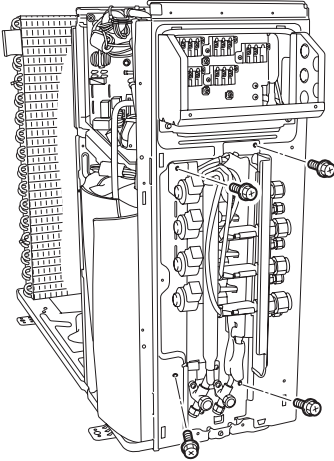
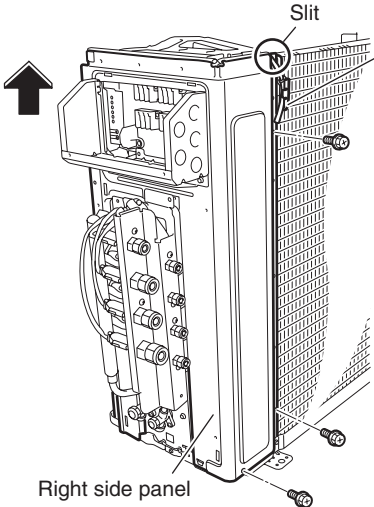
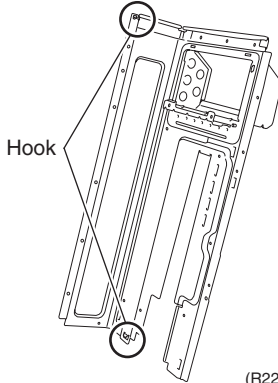
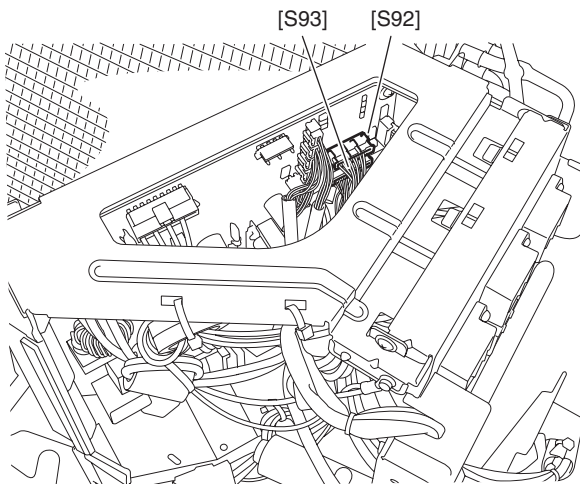


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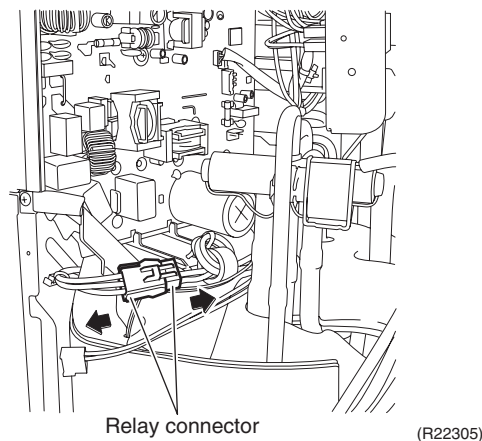
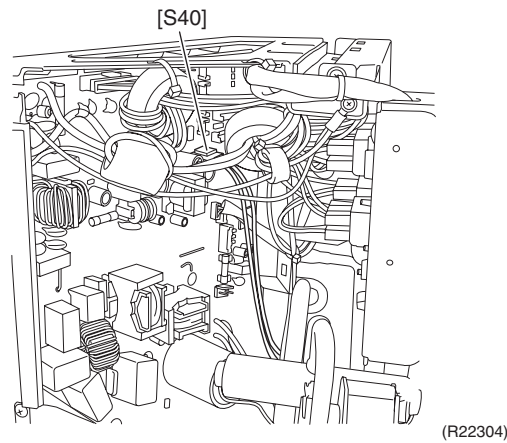
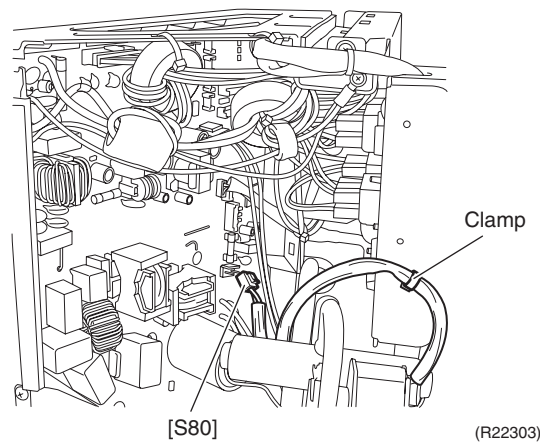
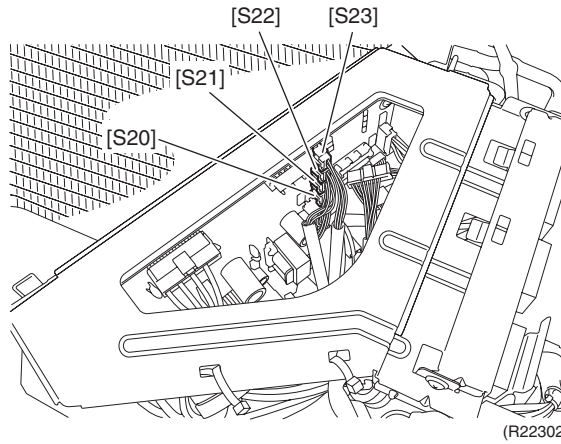
♦ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.

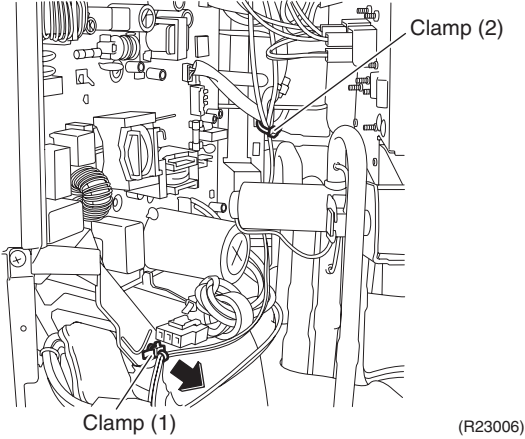
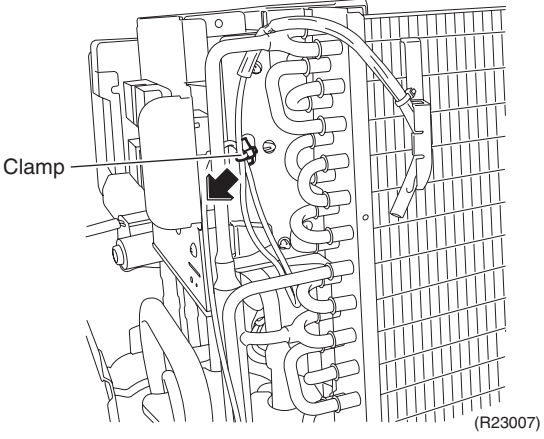
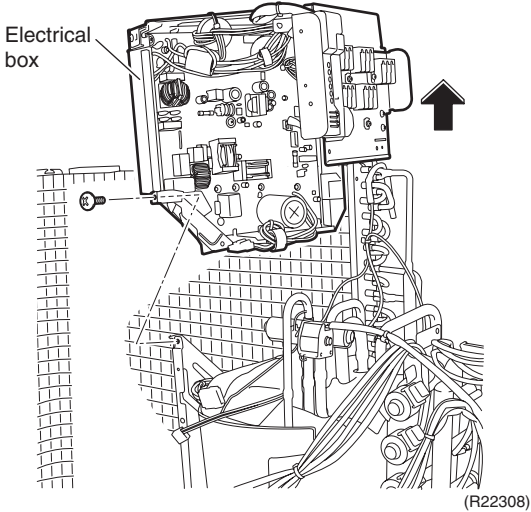
Step	Procedure	Points
1. Remove the terminal cover.	<p>Terminal cover</p> <p>(R22290)</p>	<p>■ When reassembling, make sure that the 2 hooks are securely fastened.</p>
1 Remove the 2 screws of the terminal cover.	<p>Hook</p> <p>(R22291)</p>	
2 Open the terminal cover and pull down to unfasten the 2 hooks.	3 Remove the terminal cover.	
2. Remove the right side panel.	<p>Drip proof plate</p> <p>Hook</p> <p>(R22292)</p>	<p>■ When reassembling, make sure that the 2 hooks are securely fastened.</p>
1 Slide the drip proof plate up to unfasten the 2 hooks and remove it.		

Step	Procedure	Points
2	Remove the 19 screws on the 5 terminal boards and disconnect the 4 connecting wires (Room A, B, C, D) and power supply wire.	
3	Loosen the 5 lock nuts and remove 5 conduits together with the 4 connecting wires (Room A, B, C, D) and the power supply wire.	 <ul style="list-style-type: none"> ■ 2-room model has no connector for room C and D. ■ 3-room model has no connector for room D. ■ 2-room model has no conduit for room C and D. ■ 3-room model has no conduit for room D.
4	Remove the 3 screws.	
5	Slide the stop valve cover downward and remove it.	  <ul style="list-style-type: none"> ■ When reassembling, make sure to fit the 3 hooks.
6	Remove the 2 screws.	

Step		Procedure	Points
<p>7 Remove the 4 screws.</p> <p>8 Release the outdoor temperature thermistor from the slit.</p> <p>9 Remove the 3 screws.</p> <p>10 Unfasten the 2 hooks and remove the right side panel.</p>		 <p>(R22298)</p>  <p>Slit</p> <p>Outdoor temperature thermistor</p> <p>Right side panel</p> <p>(R22299)</p>	<ul style="list-style-type: none"> ■ Some models do not have a slit for outdoor temperature thermistor harness. ■ When reassembling, make sure that the 2 hooks are securely fastened.  <p>Hook</p> <p>(R22300)</p>
<p>3. Remove the electrical box.</p>		 <p>[S93] [S92]</p> <p>(R22301)</p>	<p>[S92]: gas pipe thermistor</p> <p>[S93]: liquid pipe thermistor</p>
<p>1 Remove the 2 connectors for thermistor.</p>			

Step	Procedure	Points
2	Disconnect the 4 connectors for electronic expansion valve coil.	<p>[S20] (white): room A [S21] (red): room B [S22] (blue): room C [S23] (yellow): room D</p> <ul style="list-style-type: none"> ■ 2-room model does not have [S22], [S23]. ■ 3-room model does not have [S23].
3	Disconnect the connector [S80] and pull out the clamp.	[S80]: four way valve coil
4	Disconnect the connector [S40].	[S40]: overload protector
5	Disconnect the relay connector for compressor.	



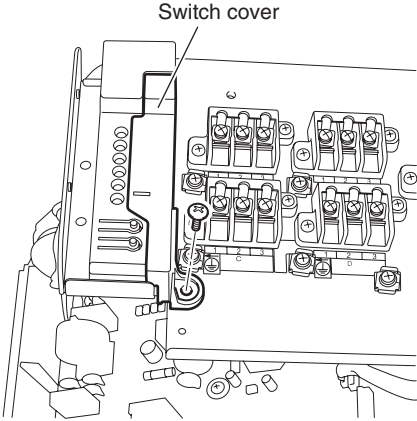
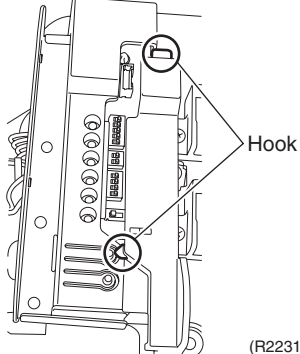
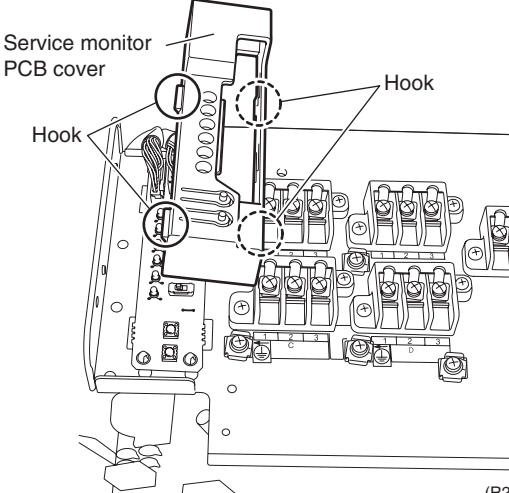
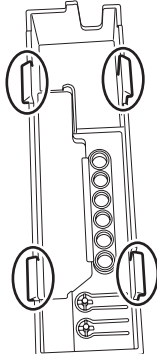
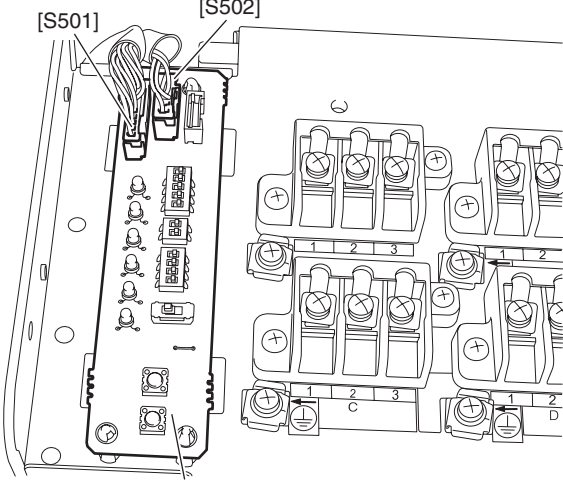
Step	Procedure	Points
6	Pull out the clamp (1) and cut the clamp (2).	
		
7	Pull out the clamp at the back of the electrical box.	
		
8	Remove the screw and remove the electrical box.	
		

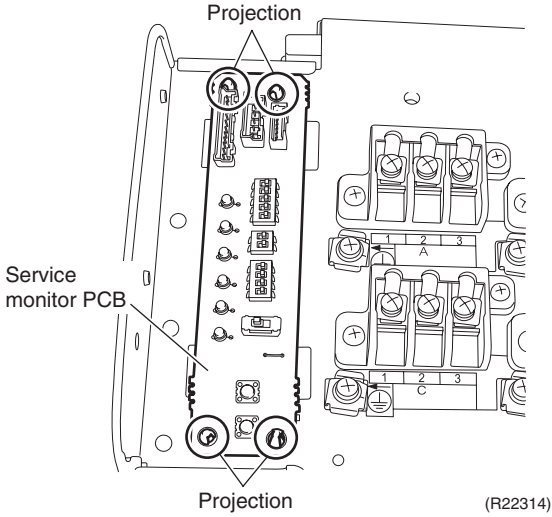
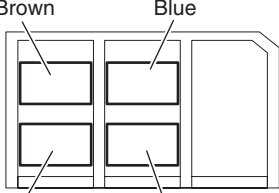
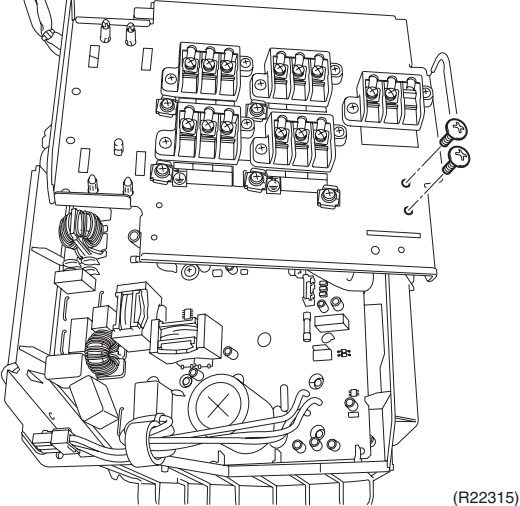
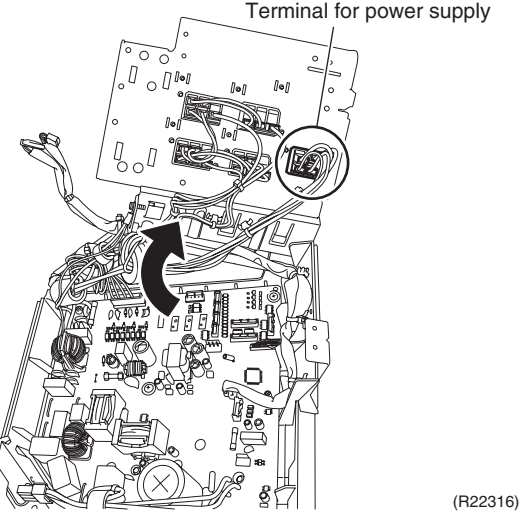
4. PCBs

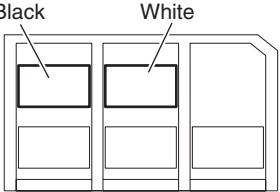
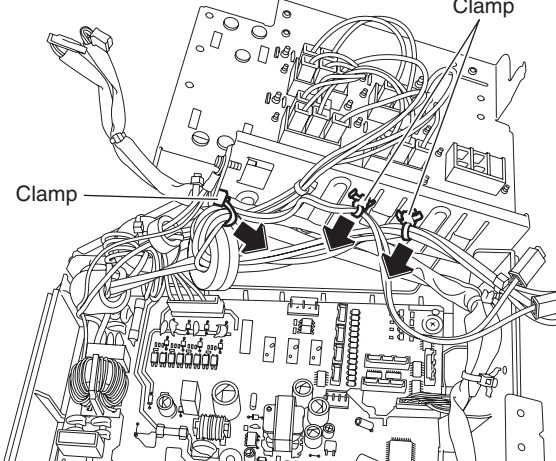
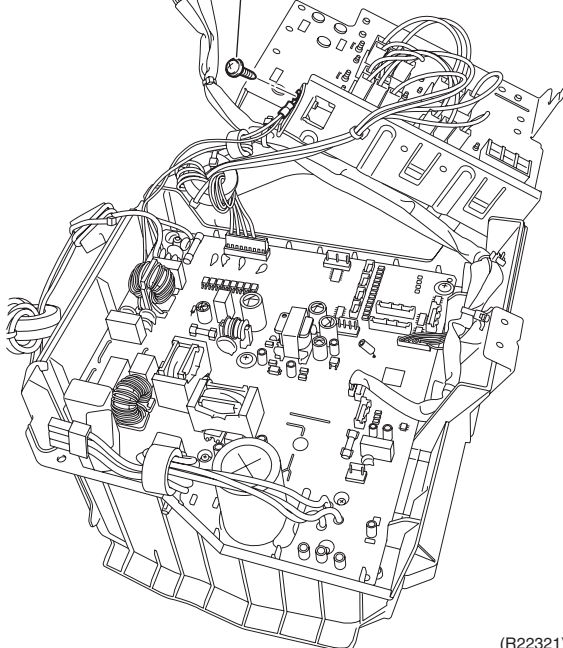


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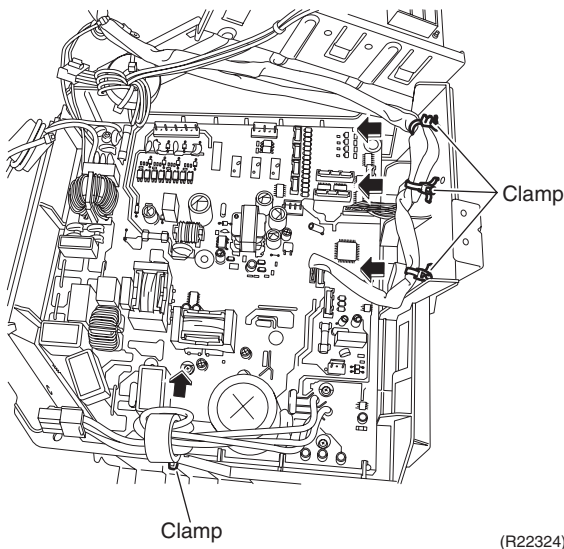
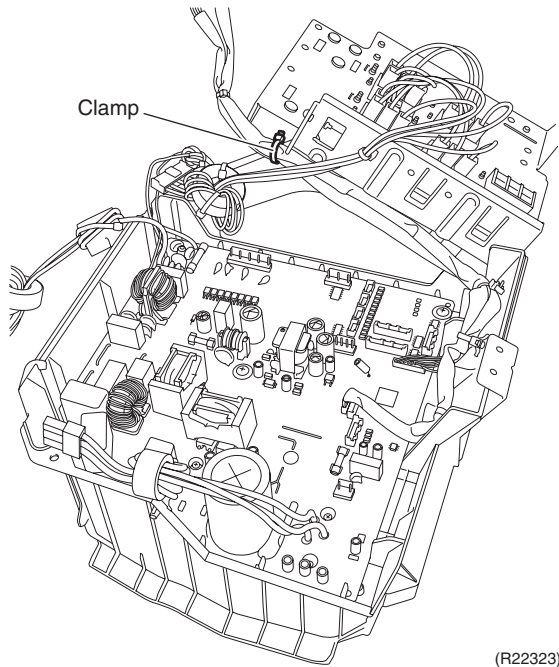
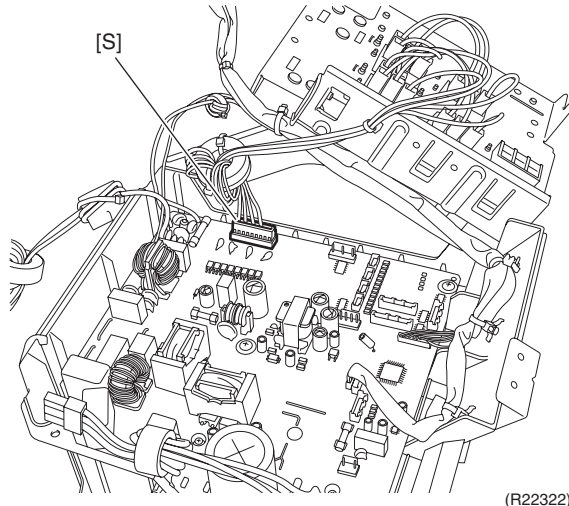
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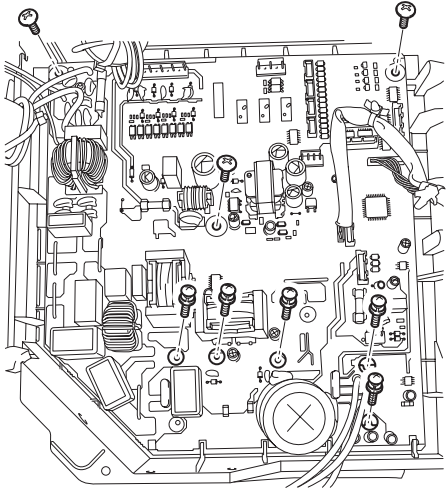
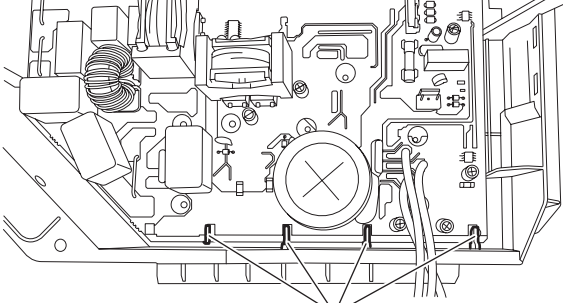
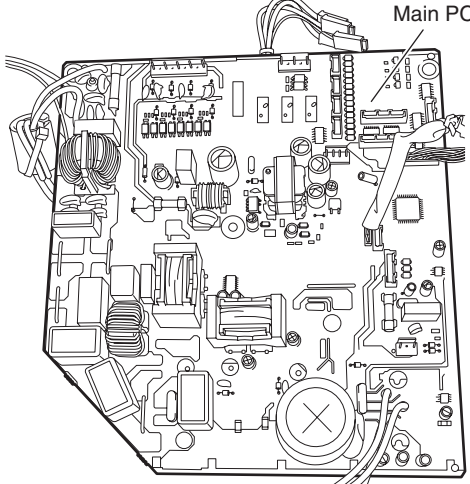
Step	Procedure	Points
1. Remove the service monitor PCB.	 <p style="text-align: right;">(R22309)</p>	<p>■ When reassembling, make sure that the 2 hooks are securely fastened.</p>  <p style="text-align: right;">(R22310)</p>
1 Remove the screw and remove the switch cover.	<p>2 Unfasten the 4 hooks and remove the service monitor PCB cover.</p>  <p style="text-align: right;">(R22311)</p>	<p>■ When reassembling, make sure that the 4 hooks are securely fastened.</p>  <p style="text-align: right;">(R22312)</p>
3 Disconnect the 2 connectors [S501] and [S502] from the service monitor PCB.	 <p style="text-align: center;">Service monitor PCB</p> <p style="text-align: right;">(R22313)</p>	<p>[S501], [S502]: to main PCB</p>

Step	Procedure	Points	
4	Unfasten the 4 projections and remove the service monitor PCB.	 <p style="text-align: center;">Projection</p> <p style="text-align: center;">Projection</p> <p style="text-align: center;">(R22314)</p>	
2. Remove the main PCB.		<p data-bbox="1094 1317 1374 1413">■ Before pulling out the terminals, confirm the terminal locations.</p>  <p data-bbox="1134 1648 1342 1671">Black White (R22317)</p>	
1	Remove the 2 screws.		 <p style="text-align: center;">(R22315)</p>
2	Turn over the terminal mounting plate.		 <p style="text-align: center;">Terminal for power supply</p> <p style="text-align: center;">(R22316)</p>
3	Disconnect the 4 terminals for power supply.		

Step	Procedure	Points
4	Cut the clamp and disconnect the 2 terminals for room B (black and white).	<p>■ Before pulling out the terminals, confirm the terminal locations.</p>  <p>(R22319)</p>
5	Pull out the 3 clamps.	 <p>(R23008)</p>
6	Remove the earth / ground screw.	 <p>(R22321)</p>

Step	Procedure	Points
7	Disconnect the connector [S].	[S]: to terminal board
8	Cut the clamp.	
9	Pull out the 4 clamps.	



Step	Procedure	Points
10	Remove the 8 screws.	
11	Unfasten the 4 hooks and remove the main PCB.	
	 <p>(R23078)</p>	
	 <p>Hook</p> <p>(R22326)</p>	
	 <p>Main PCB</p> <p>(R22327)</p>	

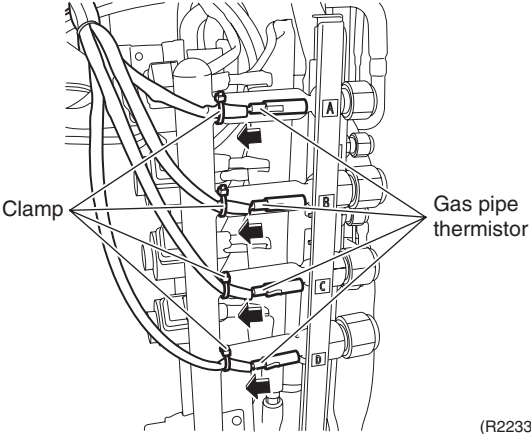
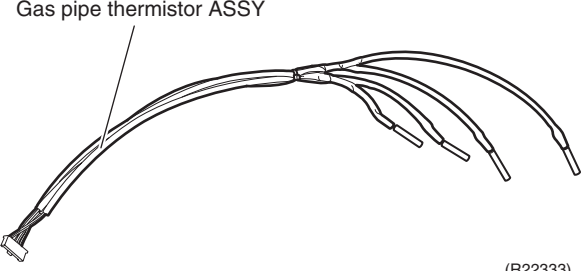
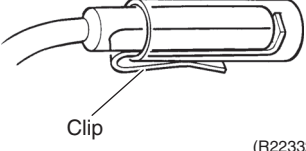
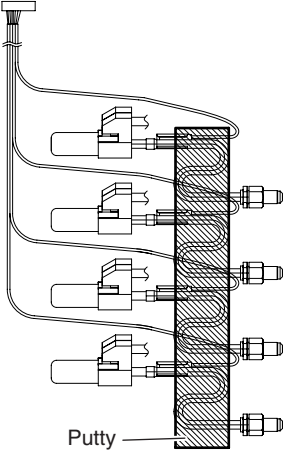
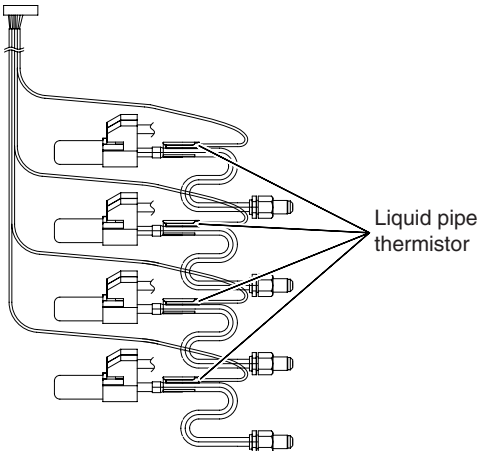
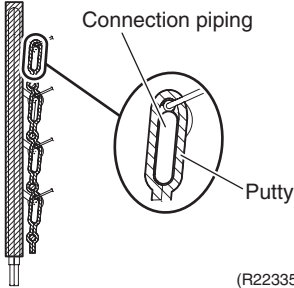
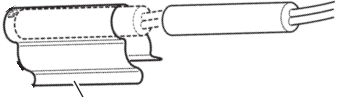
5. Thermistor ASSYs



Warning

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

Step	Procedure	Points
<p>1. Remove the thermistor ASSY.</p>		<p>■ Be careful not to lose the clip for the thermistor.</p>
<p>1 Cut the clamp and pull out the outdoor heat exchanger thermistor.</p>		
<p>2 Open the sound blanket (outer top) and sound blanket (middle top) and detach the discharge pipe thermistor.</p>		<p>■ Be careful not to lose the fixture for the thermistor.</p>
<p>3 Remove the thermistor ASSY.</p>		

Step	Procedure	Points
2. Remove the gas pipe thermistors ASSY.	 <p>Clamp</p> <p>Gas pipe thermistor</p> <p>(R22331)</p>  <p>Gas pipe thermistor ASSY</p> <p>(R22333)</p>	<ul style="list-style-type: none"> ■ The number of the gas pipe thermistors varies depending on the model. ■ Be careful not to lose the clip of the thermistor.  <p>Clip</p> <p>(R22332)</p>
3. Remove the liquid pipe thermistor ASSY.	 <p>Putty</p> <p>(R22334)</p>  <p>Liquid pipe thermistor</p> <p>(R22336)</p>	<ul style="list-style-type: none"> ■ The number of the liquid pipe thermistors varies depending on the model. ■ When reattaching the putty, make sure there are no gap between the connection piping and putty. ■ Be careful not to lose the fixture for the thermistor.  <p>Connection piping</p> <p>Putty</p> <p>(R22335)</p>  <p>Fixture</p> <p>(R22337)</p>

6. Electronic Expansion Valve Coil ASSY



Warning

- ◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.
- ◆ Be careful not to get yourself burnt with the pipes and other parts that are heated by the gas brazing machine.
- ◆ If the refrigerant gas leaks during work, ventilate the room. (If the refrigerant gas is exposed to flames, toxic gas may be generated.)
- ◆ Since it may happen that the refrigerant oil in the compressor catches fire, prepare wet cloth so as to extinguish fire immediately.



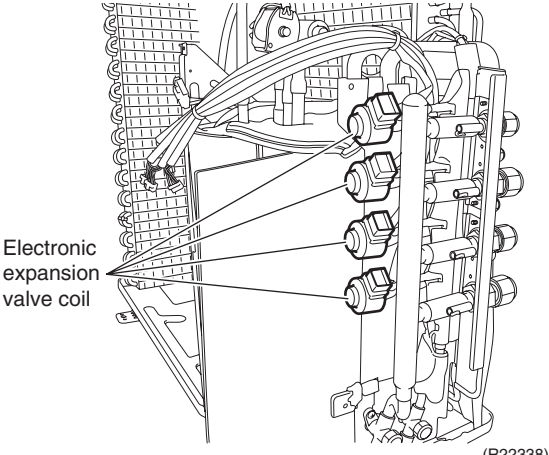
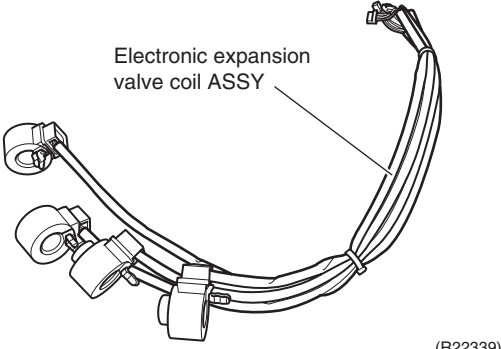
Caution

- ◆ From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.
- ◆ Restore the piping by non-oxidation brazing.



Note

- ◆ 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.
- ◆ 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 outdoor heat exchanger fin.
- ◆ 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.

Step	Procedure	Points
1	Pull out the 4 electronic expansion valve coils.	 <p style="text-align: right;">(R22338)</p>
2	Remove the electronic expansion valve coil ASSY.	 <p style="text-align: right;">(R22339)</p>

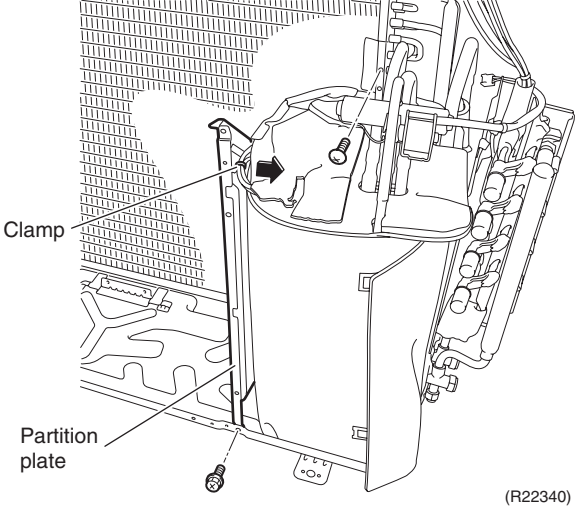
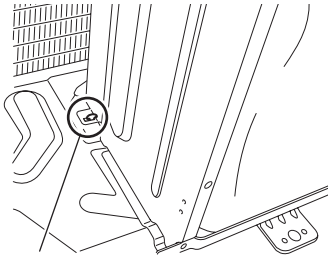
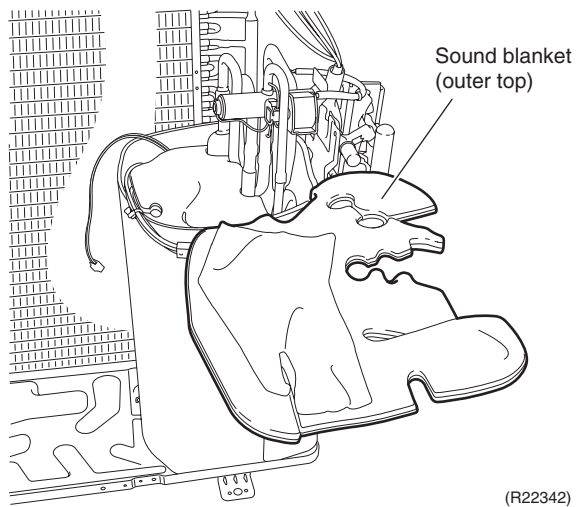
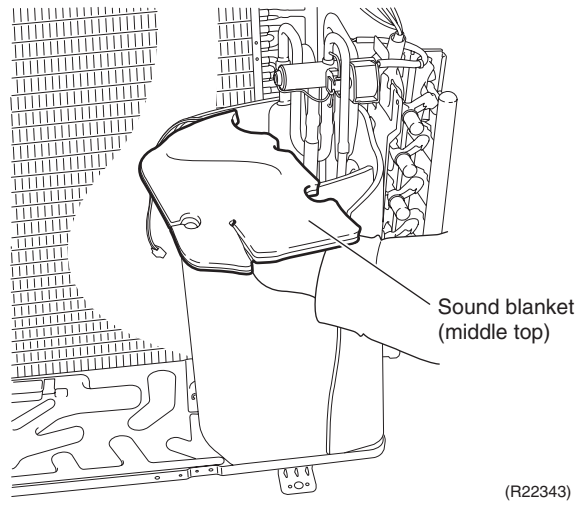
- The number of the electronic expansion valve coils varies depending on the model.

7. Partition Plate / Sound Blankets

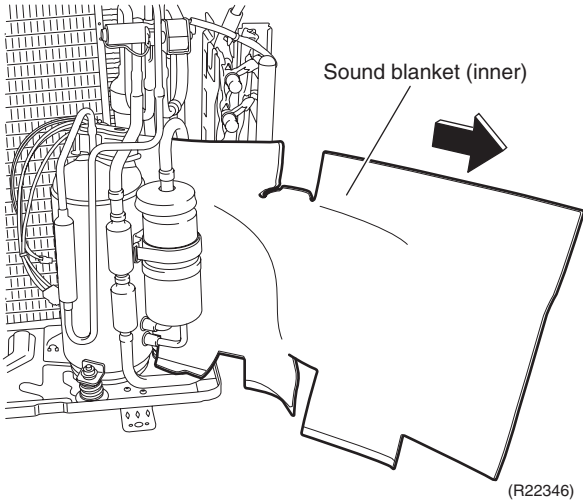
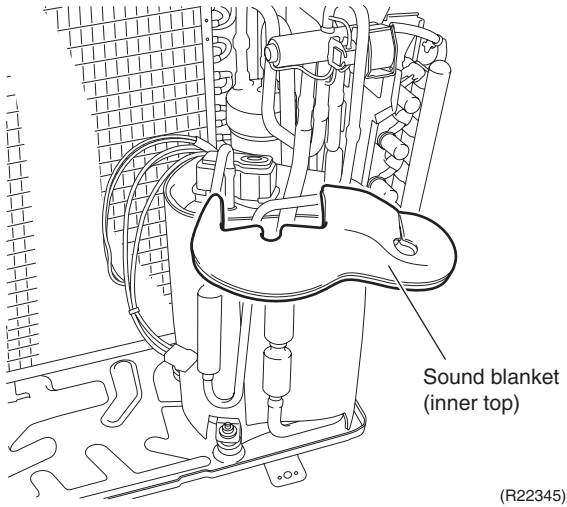
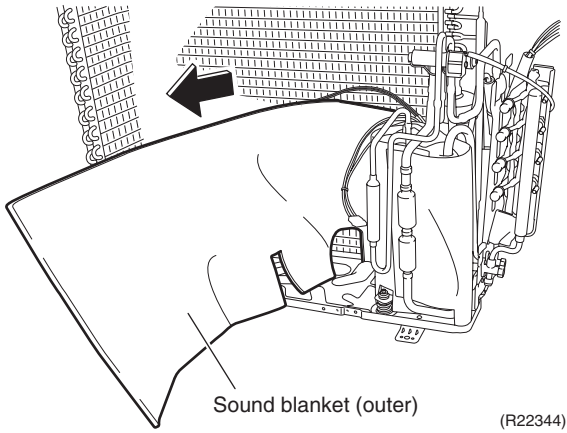


Warning

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

Step	Procedure	Points
<p>1. Remove the partition plate.</p> <p>1 Remove the 2 screws and pull out the clamp.</p> <p>2 Lift up the partition plate and remove it.</p>	 <p>(R22340)</p>	<p>■ When reassembling, fit the lower hook into the bottom frame.</p>  <p>(R22341)</p>
<p>2. Remove the sound blankets.</p> <p>1 Remove the sound blanket (outer top).</p> <p>2 Remove the sound blanket (middle top).</p>	 <p>(R22342)</p>  <p>(R22343)</p>	

Step	Procedure	Points
3	Remove the sound blanket (outer).	<ul style="list-style-type: none"> Since the piping ports are torn easily, remove the sound blanket carefully.
4	Remove the sound blanket (inner top).	
5	Remove the sound blanket (inner).	



8. Four Way Valve



Warning

- ♦ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.
- ♦ Be careful not to get yourself burnt with the pipes and other parts that are heated by the gas brazing machine.
- ♦ If the refrigerant gas leaks during work, ventilate the room. (If the refrigerant gas is exposed to flames, toxic gas may be generated.)



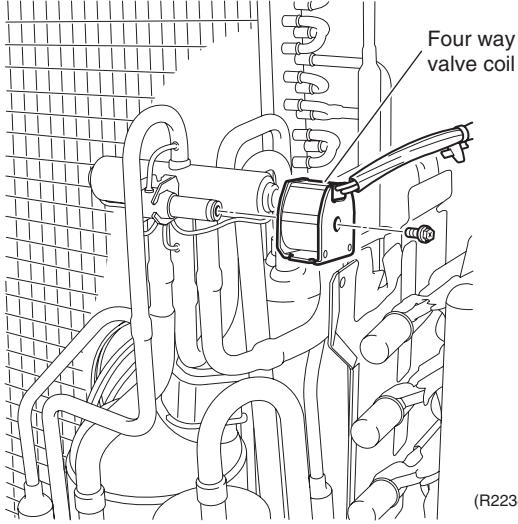
Caution

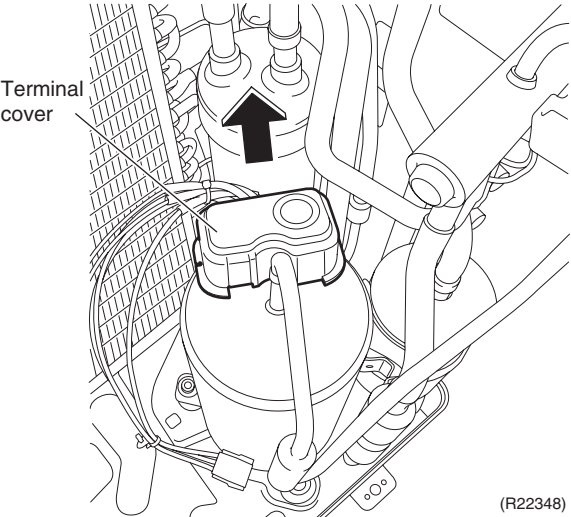
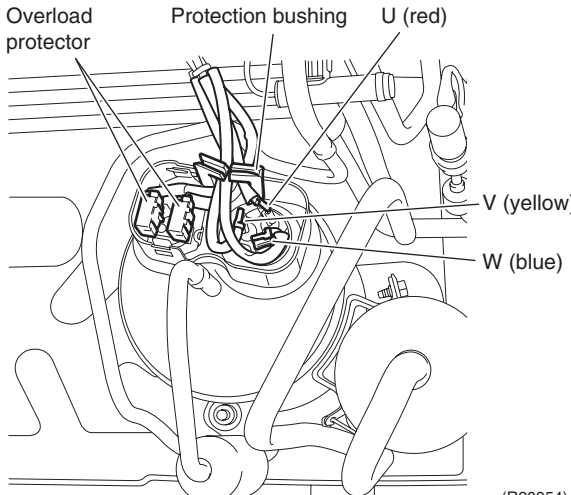
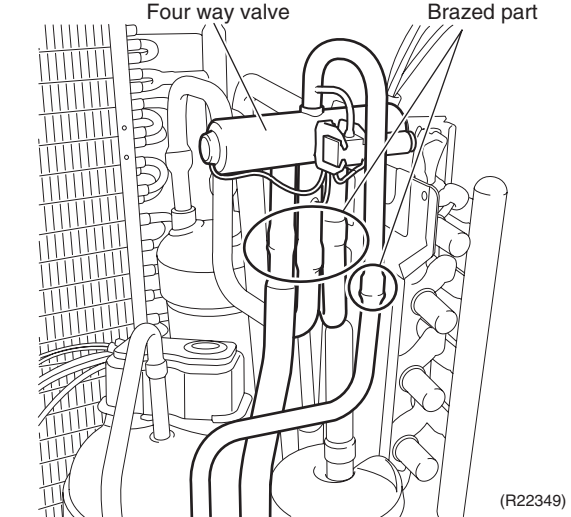
- ♦ From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.
- ♦ Cautions for restoration
 1. Restore the piping by non-oxidation brazing.
 2. It is required to prevent the carbonization of the oil inside the four way valve and the deterioration of the gaskets affected by heat. (Keep below 120°C (248°F).) For the sake of this, wrap the four way valve with wet cloth and provide water so that the cloth does not dry.



Note

- ♦ 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.
- ♦ 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 outdoor heat exchanger fin.
- ♦ 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.

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

Step	Procedure	Points
2	Remove the terminal cover.	 <p>Terminal cover</p> <p>(R22348)</p>
3	Remove the protection bushing.	 <p>Overload protector</p> <p>Protection bushing</p> <p>U (red)</p> <p>V (yellow)</p> <p>W (blue)</p> <p>(R20954)</p>
4	Disconnect the compressor lead wires and the overload protector.	
5	Heat up the 4 brazed parts and remove the four way valve.	 <p>Four way valve</p> <p>Brazed part</p> <p>(R22349)</p>

9. Compressor



Warning

- ◆ Be sure to wait for 10 minutes or more after turning off all power supplies before disassembling work.
- ◆ Be careful not to get yourself burnt with the pipes and other parts that are heated by the gas brazing machine.
- ◆ If the refrigerant gas leaks during work, ventilate the room. (If the refrigerant gas is exposed to flames, toxic gas may be generated.)
- ◆ Since it may happen that the refrigerant oil in the compressor catches fire, prepare wet cloth so as to extinguish fire immediately.



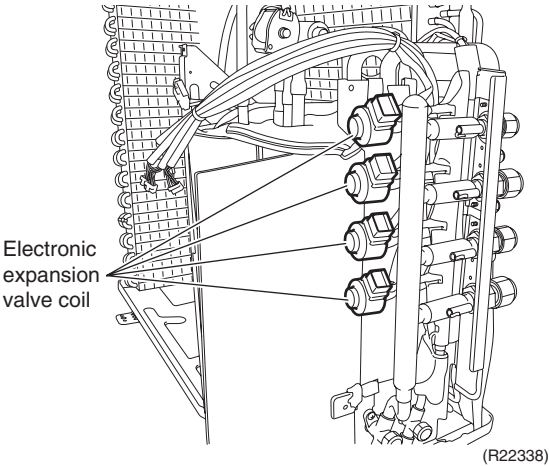
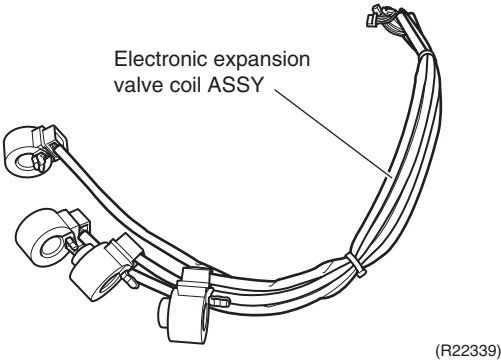
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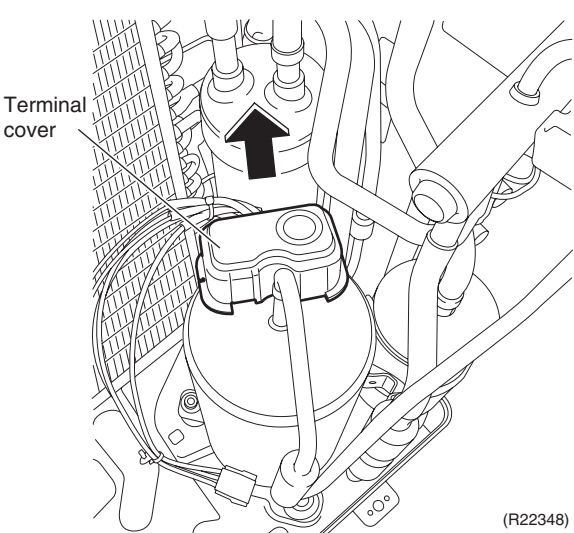
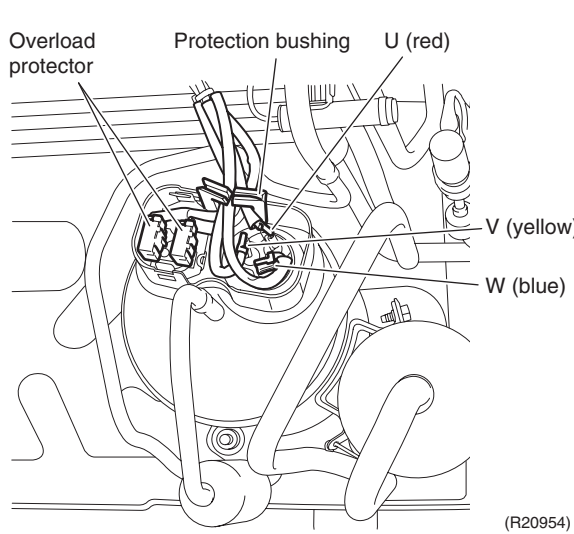
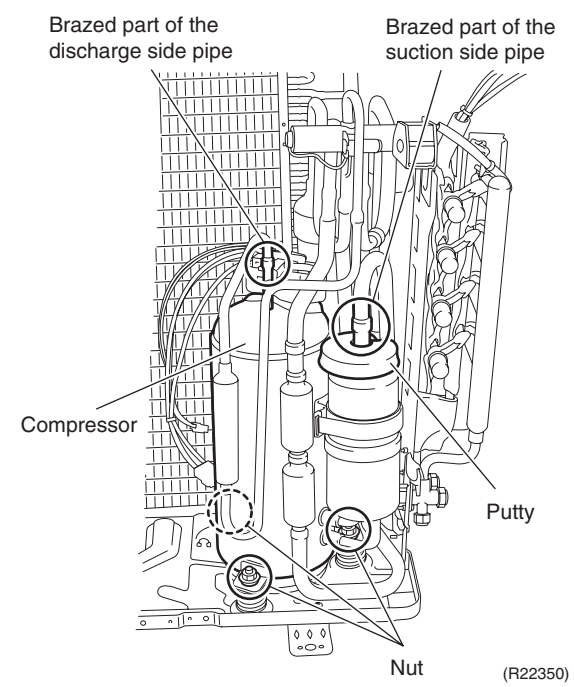
- ◆ From the viewpoint of global environment protection, do not discharge the refrigerant gas in the atmosphere. Make sure to collect all the refrigerant gas.
- ◆ Restore the piping by non-oxidation brazing.



Note

- ◆ 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.
- ◆ 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 outdoor heat exchanger fin.
- ◆ 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.

Step	Procedure	Points
1	Pull out the 4 electronic expansion valve coils. 	■ The number of the electronic expansion valve coils varies depending on the model.
2	Remove the electronic expansion valve coil ASSY. 	

Step	Procedure	Points
3	Remove the terminal cover.	 <p>Terminal cover</p> <p>(R22348)</p>
4	Remove the protection bushing.	 <p>Overload protector</p> <p>Protection bushing</p> <p>U (red)</p> <p>V (yellow)</p> <p>W (blue)</p> <p>(R20954)</p>
5	Disconnect the compressor lead wires and the overload protector.	
6	Remove the putty.	 <p>Brazed part of the discharge side pipe</p> <p>Brazed part of the suction side pipe</p> <p>Compressor</p> <p>Putty</p> <p>Nut</p> <p>(R22350)</p>
7	Heat up the brazed part of the discharge side pipe and disconnect it.	
8	Heat up the brazed part of the suction side pipe and disconnect it.	
9	Remove the 3 nuts.	
10	Lift up the compressor and remove it.	

Revision History

Month / Year	Version	Revised contents
08 / 2015	Si121558E	First edition
02 / 2016	Si121558EA	Model Addition: 2MXL18QMVJU, 3MXL24QMVJU

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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