

Your Ultimate Source for OEM Repair Manuals

FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

2024 Nissan Ariya Service and Repair Manual

Go to manual page



RDE-001931223-05-000376550

1	Refrigerant pressure sensor	(2)	O-ring	3	High-pressure cooler pipe 1
4	High-pressure cooler pipe 2	5	Bracket 4	6	Battery coolant chiller
7	Refrigerant temperature sensor (battery chiller outlet)	8	Sensor clip	9	Foam seal
10	High-pressure cooler pipe 7	1	Refrigerant temperature sensor (battery chiller inlet)	12	High-pressure cooler pipe 6

13	Expansion valve (battery chiller)	14	High-pressure cooler pipe 8		High-pressure cooler pipe 3			
16	High-pressure cooler pipe 5	17	1 way valve	18	High-pressure cooler pipe 4			
19	High pressure refrigerant channel switching valve	20	Bracket 1	21	Electric expansion valve (heater)			
22	Bracket 2	23	Sub harness		Electric expansion valve (cooler)			
25	Bracket 3							
\bigcirc	: Clip							
8	: Always replace after every disassembly.							
٩	: N•m (kg-m, in-lb)							
\bullet , \blacksquare , \blacksquare , \checkmark , \bullet : Indicates that the part is connected at points with same symbol in actual vehicle.								

HIGH-PRESSURE FLEXIBLE PIPE ASSEMBLY



1	High-pressure flexible pipe	2	Condencer discharge refrigerant temperature sensor	3	Sensor clip				
4	Foam seal								
\bigcirc	: Clip								
8	: Always replace after every disassembly.								

LOW-PRESSURE REFRIGERATOR PIPE ASSEMBLY



RDE-001931223-03-000376547

1	Evaporator discharge refrigerant temperature sensor	2	Таре	3	Foam seal		
4	Sensor clip	5	Low-pressure refrigerator pipe 1	6	Low-pressure refrigerator pipe 2		
\bigcirc	O-ring	8	Evaporator pressure regulator				
۲	Always replace after every disassembly.						
Ŷ	: N•m (kg-m, in-lb)						

ACCUMULATOR ASSEMBLY

SEC. 276



RDE-001931223-04-000376548

1	Low-pressure pipe	0	O-ring	3	Low pressure refrigerant channel switching valve			
4	Bracket	5	Accumulator					
\bigcirc	: Clip							
\bigotimes	: Always replace after every disassembly.							
6	: N•m (kg-m, in-lb)							

CAUTION:

Perform lubricant return operation before each refrigeration system disassembly. However, if a large amount of refrigerant or lubricant leak is detected, never perform lubricant return operation. Refer to <u>Perform Lubricant Return</u> <u>Operation</u>.

REMOVAL

1 Use a refrigerant collecting equipment (for HFO-1234yf) to discharge the refrigerant. Refer to <u>Recycle Refrigerant</u>.

2 Refer to accumulator assembly removal procedure 2 to 8 and remove radiator, condenser, radiator fan, accumulator assembly, high-pressure flexible pipe assembly and cooler pipe A and B together. Refer to <u>Removal & Installation</u>.

- 3 Disconnect high-pressure flexible pipe assembly from cooler pipe A. Refer to Removal & Installation.
- 4 Remove mounting bolt (A), and then disconnect cooler pipe A from condenser.



CAUTION:

Cap or wrap the joint of the A/C piping and condenser with suitable material such as vinyl tape to avoid the entry of air.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

- To prevent degradation in insulation performance, use special electric compressor oil as the compressor oil.
- In order to prevent conventional PAG oil from becoming mixed in, never reuse recovered electric compressor oil and instead always use new oil. The use of oil including the conventional PAG oil may degrade the performance of insulation.
- To prevent performance degradation, never use a fluorescent agent in order to detect refrigerant leakage. Also be careful that a fluorescent agent never enter the oil.
- To prevent leakage of refrigerant, replace the O-ring with a new one. Apply a coat of electric compressor oil to the O-ring prior to installation.
- Use a refrigerant collecting equipment (for HFO-1234yf) to charge the refrigerant. Refer to Charge Refrigerant.
- Perform a check for refrigerant leakage when charging with refrigerant. Refer to <u>Leak Test</u>.

CAUTION:

Perform lubricant return operation before each refrigeration system disassembly. However, if a large amount of refrigerant or lubricant leak is detected, never perform lubricant return operation. Refer to <u>Perform Lubricant Return</u> <u>Operation</u>.

REMOVAL

1 Use a refrigerant collecting equipment (for HFO-1234yf) to discharge the refrigerant. Refer to <u>Recycle Refrigerant</u>.

2 Refer to accumulator assembly removal procedure 2 to 8 and remove radiator, condenser, radiator fan, accumulator assembly, high-pressure flexible pipe assembly and cooler pipe A and B together. Refer to <u>Removal & Installation</u>.

3 Remove mounting bolt (A), and then disconnect cooler pipe B from condenser.



CAUTION:

Cap or wrap the joint of the A/C piping and condenser with suitable material such as vinyl tape to avoid the entry of air.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

- To prevent degradation in insulation performance, use special electric compressor oil as the compressor oil.
- In order to prevent conventional PAG oil from becoming mixed in, never reuse recovered electric compressor oil and instead always use new oil. The use of oil including the conventional PAG oil may degrade the performance of insulation.
- To prevent performance degradation, never use a fluorescent agent in order to detect refrigerant leakage. Also be careful that a fluorescent agent never enter the oil.
- To prevent leakage of refrigerant, replace the O-ring with a new one. Apply a coat of electric compressor oil to the O-ring prior to installation.
- Perform a check for refrigerant leakage when charging with refrigerant. Refer to Leak Test.

CAUTION:

Perform lubricant return operation before each refrigeration system disassembly. However, if a large amount of refrigerant or lubricant leak is detected, never perform lubricant return operation. Refer to <u>Perform Lubricant Return</u> <u>Operation</u>.

REMOVAL

1 Use a refrigerant collecting equipment (for HFO-1234yf) to discharge the refrigerant. Refer to <u>Recycle Refrigerant</u>.

2 Remove low-pressure refrigerator pipe assembly. Refer to <u>Removal & Installation</u>.

3 Disconnect high-pressure cooler pipe assembly from cooler pipe B. Refer to <u>Removal & Installation</u>.

4 Disconnect low-pressure flexible hose from Accumulator assembly. Refer to Removal & Installation.

5 Disconnect high-pressure flexible pipe assembly from high-pressure cooler pipe assembly. Refer to <u>Removal & Installation</u>.

6 Disconnect condenser discharge refrigerant temperature sensor harness connector (A) and high pressure refrigerant channel switching valve harness connector (B).



RPR-001931234-01-000356244

7 Disengage harness fixing clip (A) from bracket of accumulator.



RPR-001931234-02-000356245

8 Remove radiator, condenser, radiator fan, accumulator assembly, high-pressure flexible pipe assembly and cooler pipe A, B as a set from vehicle. Refer to <u>RADIATOR : Removal & Installation</u>.

9 Remove cooler pipe A from condenser. Refer to Removal & Installation.

10 Remove accumulator assembly mounting bolts (A).



RPR-001931234-03-000356246

11 Remove accumulator assembly fixing screws (A).



12 Remove accumulator assembly from radiator and radiator fan.

13 Remove High-pressure flexible pipe assembly from accumulator assembly. Refer to <u>Removal & Installation</u>.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

- To prevent degradation in insulation performance, use special electric compressor oil as the compressor oil.
- In order to prevent conventional PAG oil from becoming mixed in, never reuse recovered electric compressor oil and instead always use new oil. The use of oil including the conventional PAG oil may degrade the performance of insulation.
- To prevent performance degradation, never use a fluorescent agent in order to detect refrigerant leakage. Also be careful that a fluorescent agent never enter the oil.
- Perform lubricant adjusting procedure before installing new accumulator assembly. Refer to <u>Lubricant Adjusting</u> <u>Procedure for Components Replacement Except Compressor</u>.
- To prevent leakage of refrigerant, replace the O-ring with a new one. Apply a coat of electric compressor oil to the O-ring prior to installation.
- Use a refrigerant collecting equipment (for HFO-1234yf) to charge the refrigerant. Refer to Charge Refrigerant.
- Perform a check for refrigerant leakage when charging with refrigerant. Refer to Leak Test.

DISASSEMBLY

- 1 Disengage harness connector fixing clip of low pressure refrigerant channel switching valve from bracket.
- 2 Remove mounting bolt, and then remove low pressure refrigerant channel switching valve from low-pressure pipe.
- 3 Remove mounting bolt, and then remove low-pressure pipe from accumulator.
- 4 Loosen mounting bolt (A), and then remove accumulator from bracket.



ASSEMBLY

Note the following items, and then assemble in the reverse order of disassembly.

CAUTION:

- To prevent leakage of refrigerant, replace the O-ring with a new one. Apply a coat of electric compressor oil to the O-ring prior to installation.
- Assemble so that the Δ mark \triangle of the accumulator \bigcirc matches the position of the notch \bigcirc of the bracket \bigcirc .



RPR-001931233-02-000368950

• Be sure to tighten accumulator mounting bolt to specified torque. Refer to Exploded View.