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2024 Nissan Armada Service and Repair Manual

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DANGER:

2 Since hybrid vehicles and electric vehicles contain a high voltage battery, there is the risk of electric shock, electric leakage, or similar accidents if the high voltage component and vehicle are handled incorrectly. Be sure to follow the correct work procedures when performing inspection and maintenance.

WARNING:

- Be sure to remove the service plug in order to disconnect the high voltage circuits before performing inspection or maintenance of high voltage system harnesses and parts.
- The removed service plug must always be carried in a pocket of the responsible worker or placed in the tool box during the procedure to prevent the plug from being connected by mistake.
- Be sure to wear insulating protective equipment consisting of glove, shoes, face shield and glasses before beginning work on the high voltage system.
- Never allow workers other than the responsible person to touch the vehicle containing high voltage parts. To keep others from touching the high voltage parts, these parts must be covered with an insulating sheet except when using them.
- Refer to <u>Precautions for High Voltage</u>.

CAUTION:

- Never bring the vehicle into the READY status with the service plug removed unless otherwise instructed in the Service Manual. A malfunction may occur if this is not observed.
- Perform lubricant return operation before each refrigeration system disassembly. However, if a large amount of refrigerant or lubricant is detected, never perform lubricant return operation. Refer to <u>Perform Lubricant Return</u> <u>Operation</u>.

REMOVAL

1 Follow the instructions below before starting the procedure.

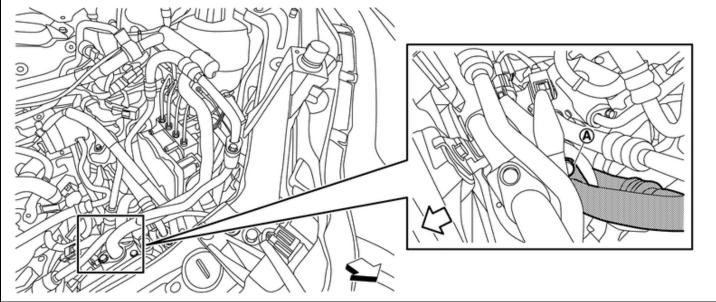
CAUTION:

- Disconnect high voltage circuit. Refer to HOW TO DISCONNECT HIGH VOLTAGE : Precautions.
- Check voltage in high voltage circuit. Refer to <u>CHECK VOLTAGE IN HIGH VOLTAGE CIRCUIT : Precautions</u>.

2 Use a refrigerant collecting equipment (for HFO-1234yf) to discharge the refrigerant. Refer to Recycle Refrigerant.

3 Remove high-pressure flexible hose from electric compressor and compressor stay. Refer to <u>Removal & Installation</u>.

4 Remove mounting bolt (A), and then disconnect low-pressure flexible hose from accumulator assembly.



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CAUTION:

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



5 Remove mounting bolt (A), and then disconnect low-pressure flexible hose from electric compressor.







CAUTION:

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

6 Remove low-pressure flexible hose from vehicle.

INSTALLATION

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

WARNING:

4 To prevent electric shock hazards, be sure to wear protective gear.

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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 Leak Test.

DANGER:

//Since hybrid vehicles and electric vehicles contain a high voltage battery, there is the risk of electric shock, electric leakage, or similar accidents if the high voltage component and vehicle are handled incorrectly. Be sure to follow the correct work procedures when performing inspection and maintenance.

WARNING:

- Be sure to remove the service plug in order to disconnect the high voltage circuits before performing inspection or maintenance of high voltage system harnesses and parts.
- The removed service plug must always be carried in a pocket of the responsible worker or placed in the tool box during the procedure to prevent the plug from being connected by mistake.
- Be sure to wear insulating protective equipment consisting of glove, shoes, face shield and glasses before beginning work on the high voltage system.
- Never allow workers other than the responsible person to touch the vehicle containing high voltage parts. To keep others from touching the high voltage parts, these parts must be covered with an insulating sheet except when using them.
- Refer to <u>Precautions for High Voltage</u>.

CAUTION:

- Never bring the vehicle into the READY status with the service plug removed unless otherwise instructed in the Service Manual. A malfunction may occur if this is not observed.
- Perform lubricant return operation before each refrigeration system disassembly. However, if a large amount of refrigerant or lubricant is detected, never perform lubricant return operation. Refer to <u>Perform Lubricant Return</u> <u>Operation</u>.

REMOVAL

1 Follow the instructions below before starting the procedure.

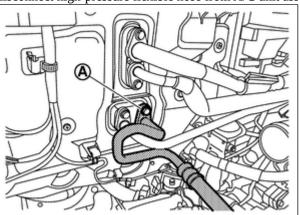
CAUTION:

- Disconnect high voltage circuit. Refer to HOW TO DISCONNECT HIGH VOLTAGE : Precautions.
- Check voltage in high voltage circuit. Refer to CHECK VOLTAGE IN HIGH VOLTAGE CIRCUIT : Precautions.

2 Use a refrigerant collecting equipment (for HFO-1234yf) to discharge the refrigerant. Refer to Recycle Refrigerant.

3 Remove high voltage power delivery assembly. Refer to <u>HIGH VOLTAGE POWER DELIVERY ASSEMBLY : Removal & Installation</u>.

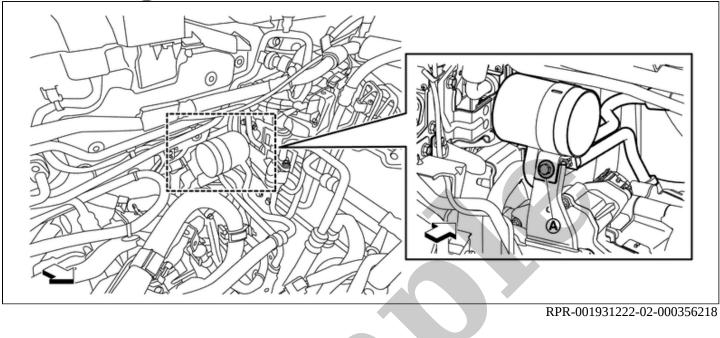
4 Remove mounting bolt (A), and then disconnect high-pressure flexible hose from A/C unit assembly.



CAUTION:

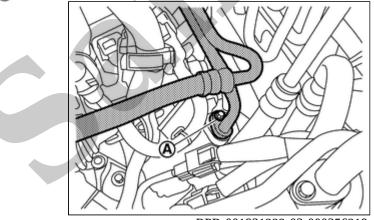
Cap or wrap the joint of the A/C piping and inner condenser with suitable material such as vinyl tape to avoid the entry of air.

5 Remove mounting bolt (A), and then remove high-pressure flexible hose from compressor stay.



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6 Remove mounting bolt (A), and then disconnect high-pressure flexible hose from electric compressor.



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24 To prevent electric shock hazards, be sure to wear protective gear.



CAUTION:

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

7 Remove high-pressure flexible hose from vehicle.

INSTALLATION

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



To prevent electric shock hazards, be sure to wear protective gear.



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 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 Disconnect refrigerant pressure sensor harness connector.

3 Clean refrigerant pressure sensor and its surrounding area, and then remove dust and rust from refrigerant pressure sensor.

4 Use a adjustable wrench or other tool to hold the refrigerant pressure sensor mounting block, and then remove the refrigerant pressure sensor from high-pressure pipe.

CAUTION:

Cap or wrap the joint of the high-pressure pipe with suitable material such as vinyl tape 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.
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- 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 <u>Charge Refrigerant</u>.
- Perform a check for refrigerant leakage when charging with refrigerant. Refer to Leak Test.

Removal & Installation

For removal and installation of electric expansion valve (cooler), refer to disassembly and assembly of high-pressure cooler pipe assembly. Refer to <u>Disassembly & Assembly</u>.

CAUTION:

Since it may not operate properly, initialize it when replacing electronic expansion valve (cooler). Refer to <u>Work</u> <u>Procedure</u>.

Removal & Installation

For removal and installation of electric expansion valve (heater), refer to disassembly and assembly of high-pressure cooler pipe assembly. Refer to <u>Disassembly & Assembly</u>.

CAUTION:

Since it may not operate properly, initialize it when replacing electronic expansion valve (heater). Refer to <u>Work</u> <u>Procedure</u>.