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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.

2013 Nissan Murano Service and Repair Manual

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Symptom Description

SIEMD-7504802

The electromagnetic noise of the rear traction motor may become more noticeable when accelerating on a steep slope (large output torque).

This occurs when the IGBT switching frequency is lowered by the inverter (rear) due to high temperature of the IGBT inside the inverter (rear). This does not indicate a problem with the inverter (rear) characteristics or control.

This phenomenon is one of the protective controls. Refer to [Protection Function](#).

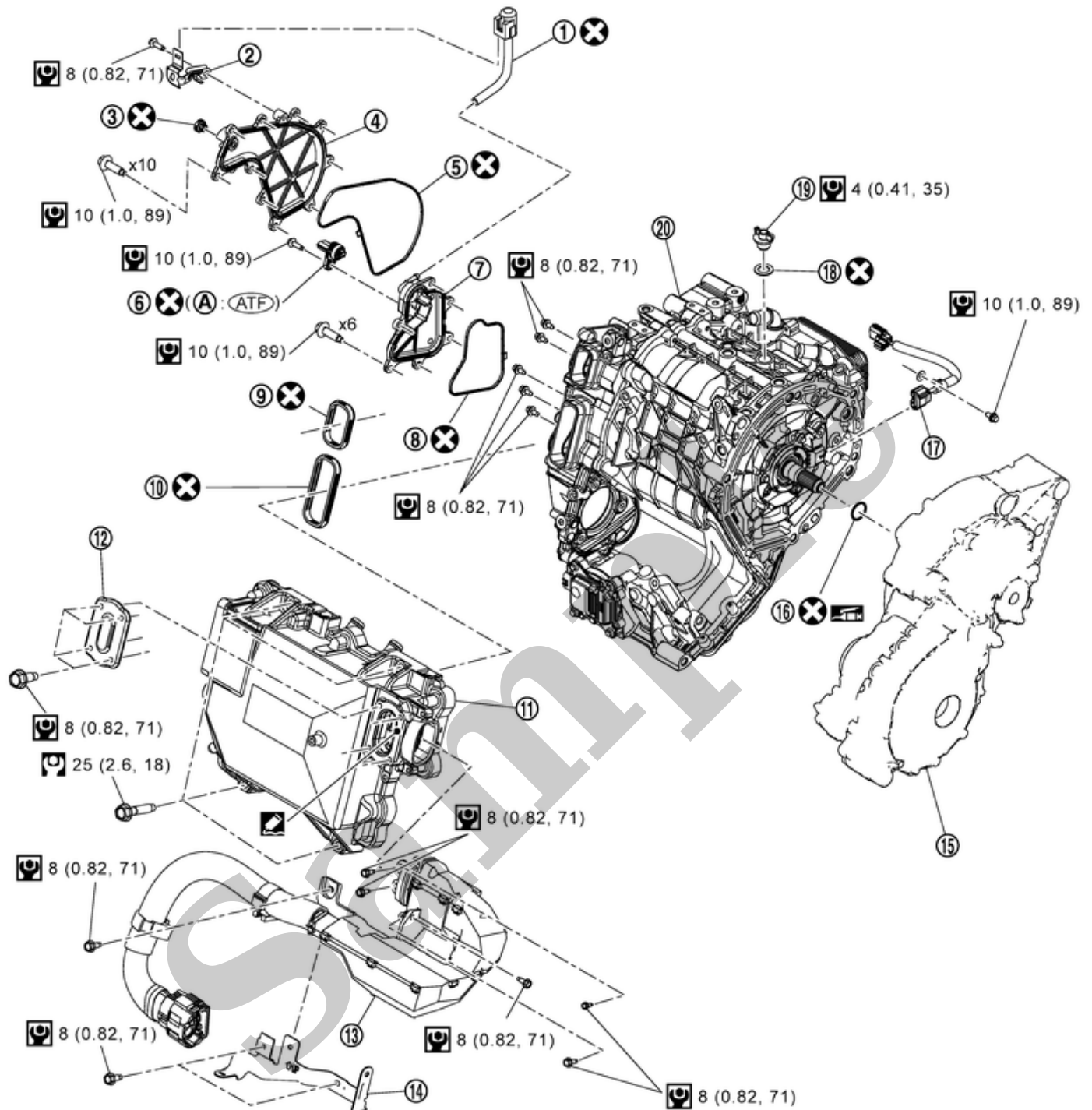
Sample

Oil Leakage Inspection

- Check that there is no oil leakage around the rear traction motor.
- If an abnormality is found, replace the rear traction motor. Refer to [Removal and Installation](#).


Sample


SEC. 290





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①	Air breather hose	②	Bracket	③	Breather
④	Excitation cover	⑤	Gasket	⑥	Rear traction motor stator temperature sensor joint connector
⑦	3-phase bus bar cover	⑧	Gasket	⑨	Seal
⑩	Seal	⑪	Inverter (rear)	⑫	High voltage harness cover
⑬	High voltage harness	⑭	Bracket	⑮	Rear final drive assembly
⑯	O-ring	⑰	Resolver harness	⑱	Gasket
⑲	Plug	⑳	Rear traction motor assembly		
Ⓐ	O-ring				

: N·m (kg-m, in-lb)

: N·m (kg-m, ft-lb)

: Always replace after every disassembly.


: Apply ATF (Genuine NISSAN Matic S).

: Apply lithium-based grease including molybdenum disulphide.

: Apply Genuine Silicone RTV or equivalent. Refer to [HOW TO USE THIS MANUAL : Recommended Chemical Products and Sealants](#).



NOTE:

The tightening torque of the plug  is a reference.

Sample

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 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 [HIGH VOLTAGE PRECAUTIONS : Precautions](#).

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.

REMOVAL

WARNING:

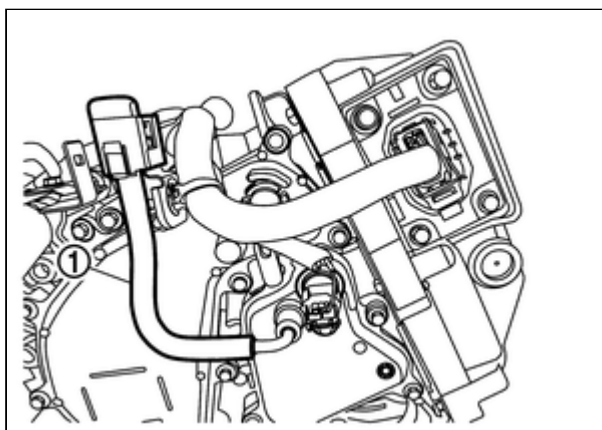
Follow the instructions below before starting the procedure.

- 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](#).

1 Remove rear suspension member assembly together with rear final drive assembly and rear traction motor with inverter (rear) from vehicle. Refer to [REAR SUSPENSION MEMBER : Removal & Installation](#).

2 Remove rear final drive assembly, rear traction motor and inverter (rear) as a set from rear suspension member assembly, after removing high voltage harness and water hoses. Refer to [Removal and Installation](#).

3 Remove air breather hose ①.

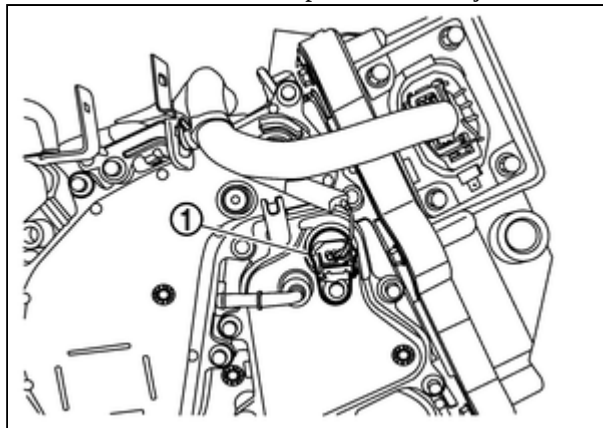


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CAUTION:

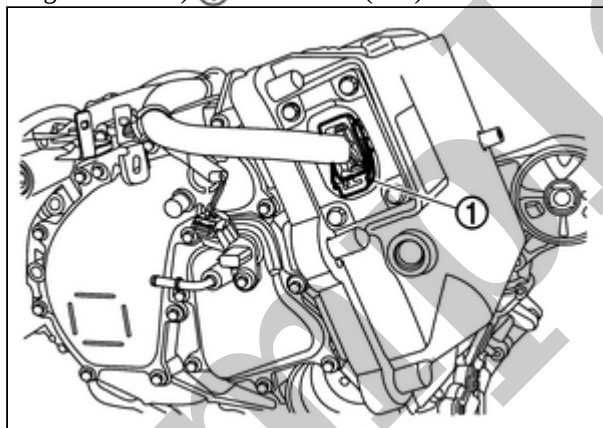
Never remove air breather hose from tube on 3-phase bus bar cover, when it is not required to replace.

4 Disconnect harness connector from rear traction motor stator temperature sensor joint connector ①.



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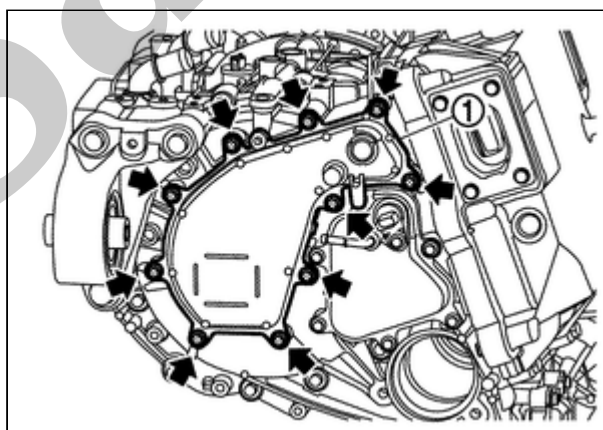
5 Disconnect harness connector (low voltage connector) ① for inverter (rear).



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6 Remove each harness and each bracket.

7 Remove excitation cover ①.



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WARNING:



To prevent electric shock hazards, be sure to put on insulated protective gear.

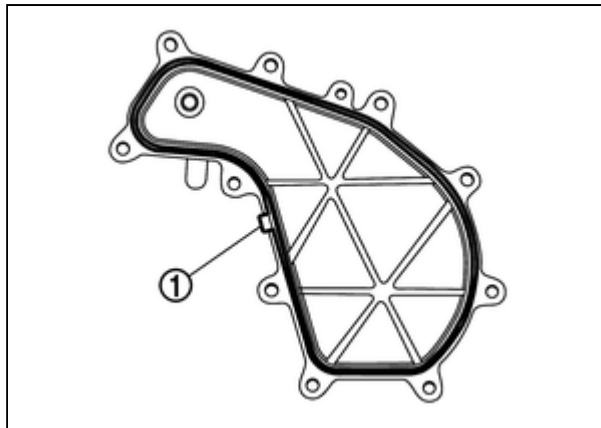


CAUTION:

- Never remove breather from excitation cover, when it is not required to replace.

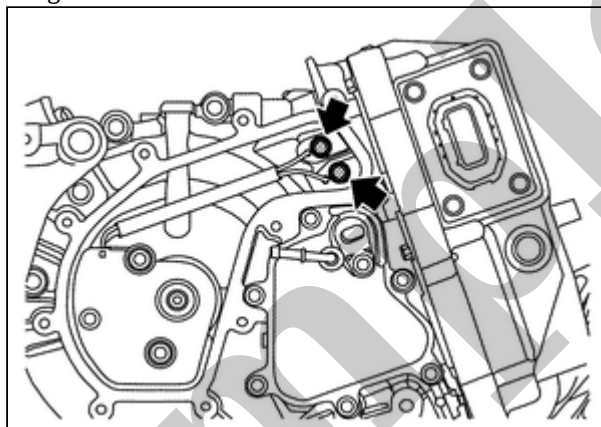
- Oil may leak out from the opening. If it does, use cloth or other material to wipe it up.

8 Remove gasket ① from excitation cover.



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9 Remove excitation bus bar terminal fixing bolts.



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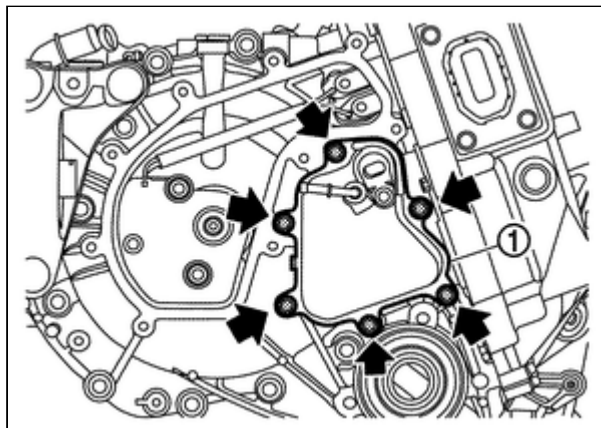
WARNING:



To prevent electric shock hazards, be sure to put on insulated protective gear.



10 Remove 3-phase bus bar cover ①.



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WARNING:



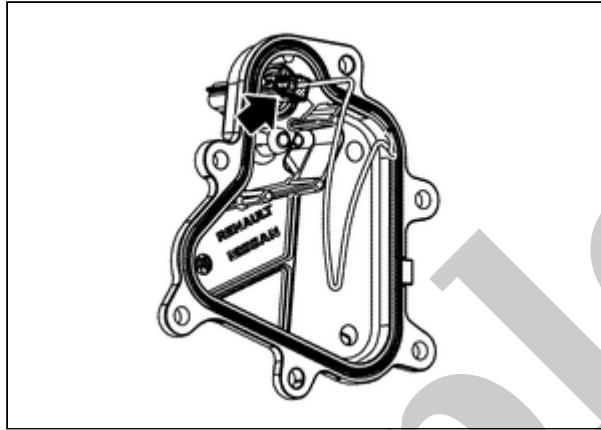
To prevent electric shock hazards, be sure to put on insulated protective gear.



CAUTION:

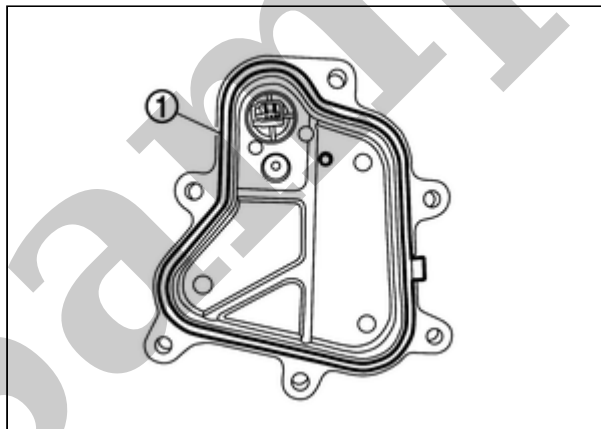
- Never remove rear traction motor stator temperature sensor joint connector from 3-phase bus bar cover, when it is not required to replace.
- Oil may leak out from the opening. If it does, use cloth or other material to wipe it up.

11 Disconnect harness connector from rear traction motor stator temperature sensor joint connector.



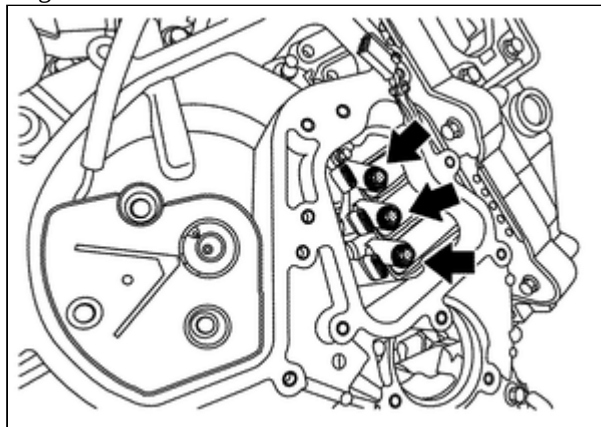
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12 Remove gasket ① from 3-phase bus bar cover.



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13 Remove 3-phase bus bar terminal fixing bolts.



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WARNING:

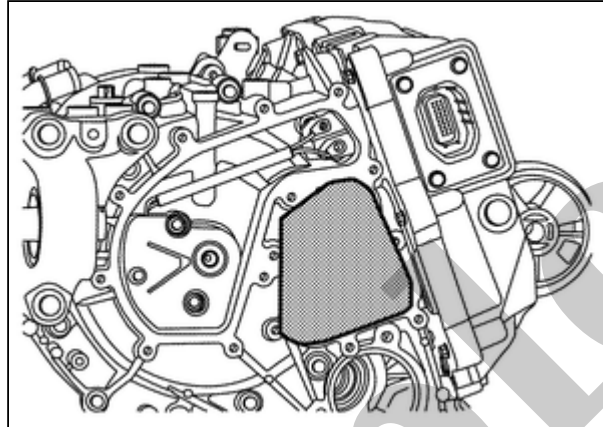


To prevent electric shock hazards, be sure to put on insulated protective gear.



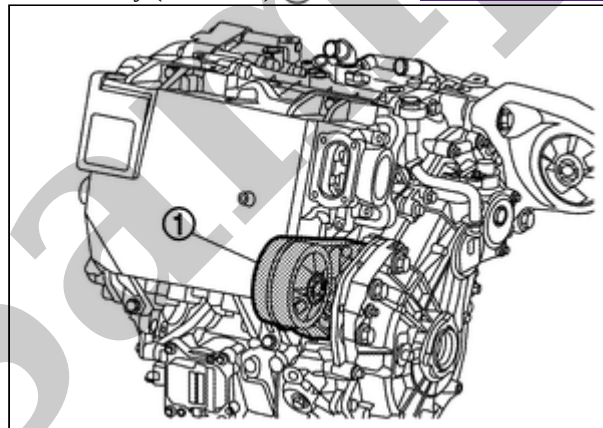
CAUTION:

- Never allow the terminal fixing bolt for the 3-phase bus bar terminal to fall into the rear traction motor.
- After removing the terminal fixing bolts on the 3-phase bus bar terminal, cover all openings of the rear traction motor with tape or other similar material to prevent contamination from dust, dirt, or other foreign materials. When the vehicle needs to be left as it is for a prolonged period of time, place the 3-phase bus bar cover in the original position.



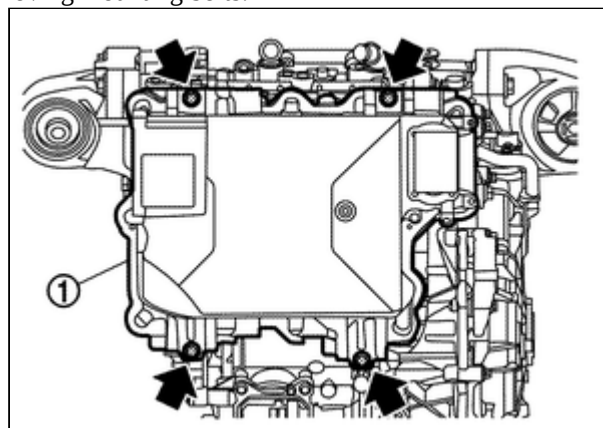
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14 Remove rear motor mounting insulator assembly (front side) ①. Refer to [Removal and Installation](#).



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15 Remove inverter (rear) ① after removing mounting bolts.



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CAUTION:

- Keep the inverter (rear) in the horizontal position when removing it.