

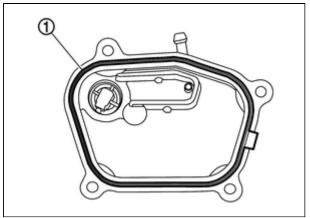
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2013 Nissan Versa Service and Repair Manual

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21 Remove the gasket 1.



RPR-002027875-18-000359609

22 Remove three-phase bus bar terminal mounting bolts (

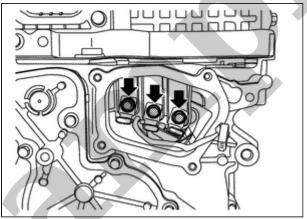


WARNING:



When performing high voltage system operations, be sure to wear insulated protective gear.

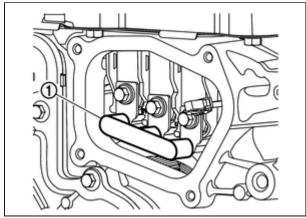




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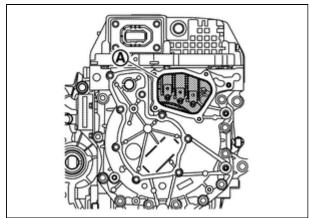
CAUTION:

- Never allow a terminal fixing bolt for the three-phase bus bar to fall into the inverter (front) during the removal operation.
- If the terminals of three-phase harness have insulation tubes (1), do not to drop insulation tubes inside the front traction motor when removing the fixing bolts.



RPR-002027875-42-000393608

After loosening the terminal fixing bolts on the three-phase bus bar, cover all openings (A) of the inverter (front) 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 three-phase bus bar cover in the original position.



RPR-002027875-20-000359611

23 Remove excitation cover mounting bolts (), and then remove excitation cover 1.

WARNING:

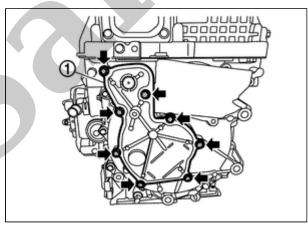


4 When performing high voltage system operations, be sure to wear insulated protective gear.



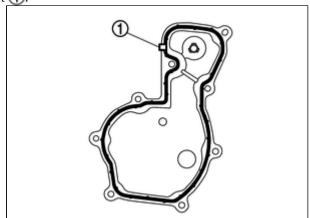
CAUTION:

- Do not remove the breather from the excitation cover.
- Never reuse breather.



RPR-002027875-21-000359612

24 Remove the excitation cover gasket ①.



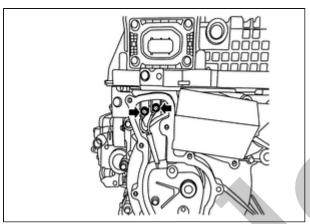
RPR-002027875-22-000359613

WARNING:



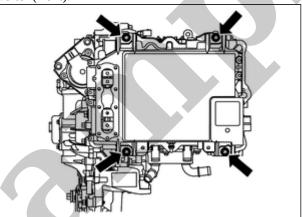
When performing high voltage system operations, be sure to wear insulated protective gear.





RPR-002027875-23-000359614

26 Remove mounting bolts () of inverter (front).

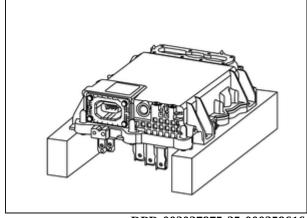


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27 Remove the inverter (front).

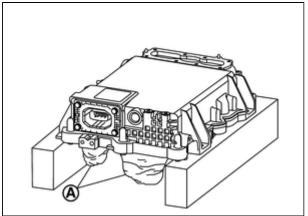
CAUTION:

- Keep the inverter (front) in the horizontal position when removing it.
- Never bend or hit the three-phase bus bar.
- When leaving the inverter (front), use wooden blocks to prevent three-phase bus bar interference.



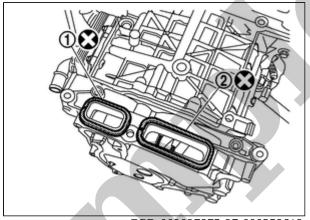
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• Cover the three-phase bus bar with shop cloth (A).



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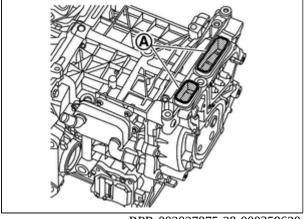
28 Remove the seal ① on the excitation bus bar opening on the front traction motor side, and remove the seal ② on the three-phase bus bar opening.



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CAUTION:

- After removing inverter (front), cover the opening (A) with tape to prevent dust, dirt, foreign material, etc. from entering them.
- Never reuse the seal 1 of excitation bus bar opening of the front traction motor side and the seal 2 of three-phase bus bar opening after removal.



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INSTALLATION

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

WARNING:

To prevent electric shock hazards, be sure to put on insulating protective gear before beginning work on the high voltage system.

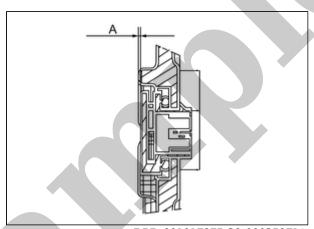


CAUTION:

When the inverter (front) is replaced, perform "ADDITIONAL SERVICE WHEN REPLACING INVERTER (FRONT)". Refer to <u>Work Procedure</u>.

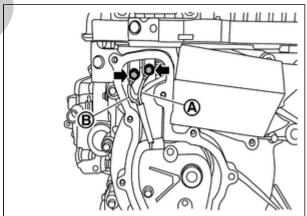
- When the inverter (front) is installed, never bend three phase bus bar and excitation bus bar or give impact.
- If the breather was removed from the excitation cover or replaced:
 - Check that the O-ring is securely installed before installing the breather.
 - After installing the breather, insert straight so that the distance the breather installation dimension from the edge of the case is A.

Step from edge of excitation cover to breather edge (A) : 0.55 mm (0.0217 in)



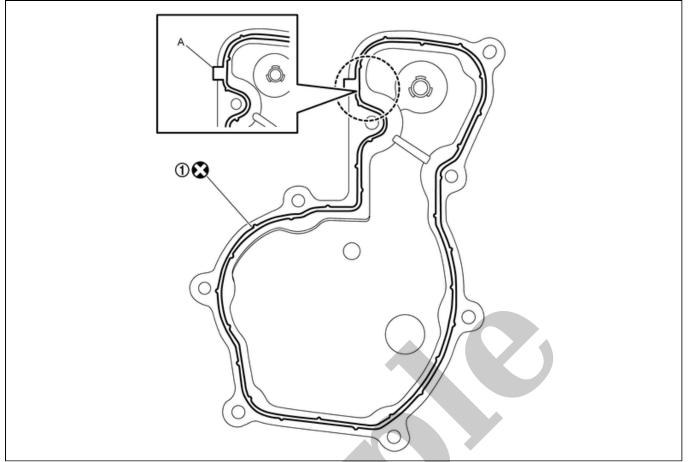
RPR-002027875-38-000359721

• When installing the excitation wiring harness onto the excitation bus bar, install the red harness terminal (Ex+) (A) onto the right side excitation bus bar, and the blue harness terminal (Ex-) (B) onto the left excitation bus bar.



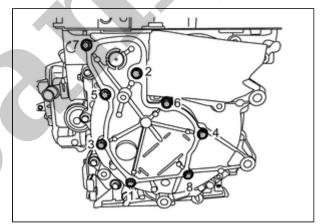
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• When installing the excitation cover gasket ①, check that the tab (A) is securely installed. The gasket is non-reusable part. Do not reuse it.



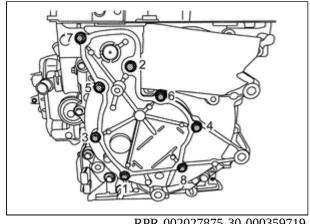
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- Follow the procedure below to install the excitation cover.
 - 1. Tighten excitation cover mounting bolts to the temporarily tighten them in numerical order shown in the figure.



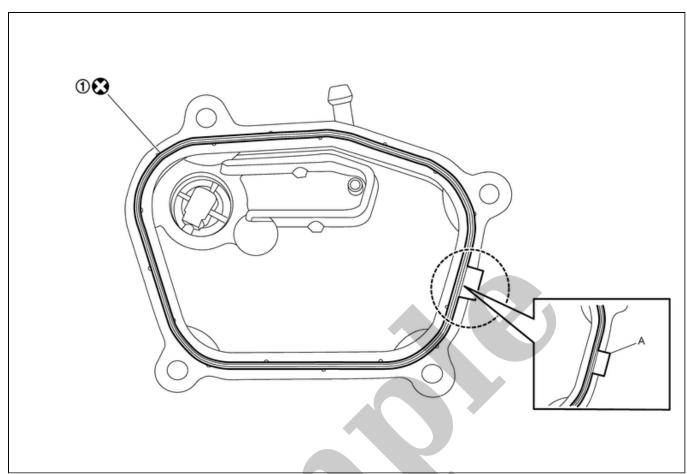
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2. Tighten excitation cover mounting bolts to the specified torque in numerical order shown in the figure.



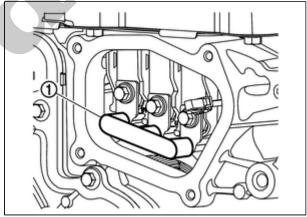
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• When installing the three-phase bus bar cover gasket ①, check that the tab (A) is securely installed. The gasket is non-reusable part. Do not reuse it.



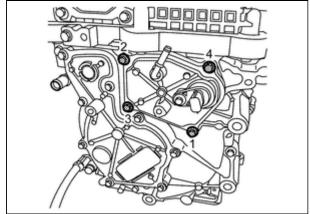
RPR-002027875-15-000359624

- Follow the procedure below to install the three-phase bus bar cover.
 - 1. If the terminals of three-phase harness have insulation tubes 1, restore the insulation tube to the original position when installing the three-phase bus bar cover.



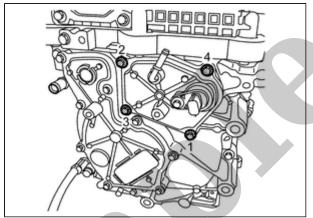
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2. Partially tighten the three-phase bus bar cover mounting bolts in the order of $1 \rightarrow 4$ shown in the figure.



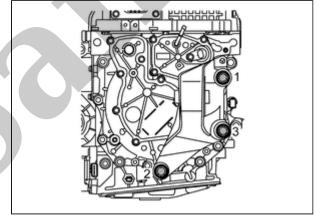
RPR-002027875-31-000359718

3. Fully tighten the three-phase bus bar cover mounting bolts in the order of $1 \rightarrow 4$ shown in the figure.



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• Partially tighten mounting bolt 1 in the figure for the motor mounting RH, then fully tighten in the order of $2 \rightarrow 3$, and finally fully tighten 1.



RPR-002027875-43-000359722

Installation Procedure when Installing the Suspension Member

- 1. Partially tighten the fastening bolts for the motor mounting bracket rear and motor mounting rear.
- 2. Partially tighten the fastening bolts of the motor mounting RH and motor mounting LH onto the suspension member.
- 3. Fully tighten the fastening bolts of the motor mounting bracket rear and motor mounting rear.
- 4. Fully tighten the fastening bolts of the motor mounting RH and motor mounting LH onto the suspension member.
- 5. When no external force is applied, check that there is no abnormal sagging or twisting of the mounts.

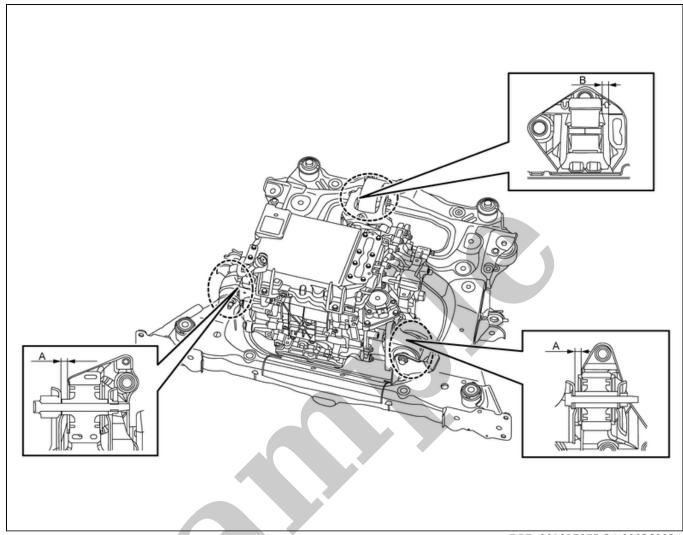
Checking After Suspension Member Installation

• After installing the suspension member, check that each clearance is within the range of A and B.

If the clearance is outside the range, adjust so that it is within the range.

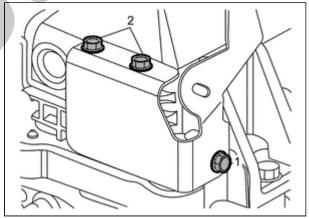
Dimension A : $11.0\pm1.0 \text{ mm} (0.433\pm0.039 \text{ in})$

Dimension B : $10.0\pm1.0 \text{ mm} (0.394\pm0.039 \text{ in})$



RPR-002027875-34-000360034

• Partially tighten the bracket mounting bolts, then fully tighten them in the order of $1 \rightarrow 2$ shown in the figure.



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