

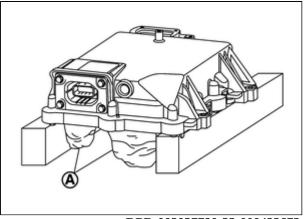
# Your Ultimate Source for OEM Repair Manuals

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.

2013 NISSAN Navara / Frontier Double Cab OEM Service and Repair Workshop Manual

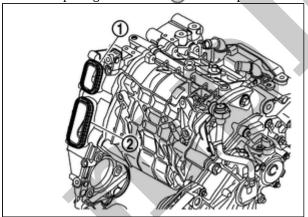
Go to manual page

- Never bend or hit the 3-phase bus bar and the excitation bus bar.
- When leaving the inverter (rear), cover the 3-phase bus bar and the excitation bus bar with shop cloths (A), and use the wooden blocks to prevent each bus bar interference.



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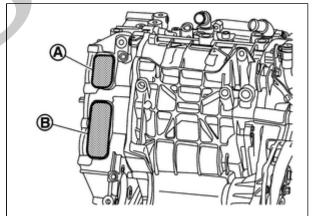
16 Remove the seal ① on the excitation bus bar opening and the seal ② on the 3-phase bus bar opening.



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#### **CAUTION:**

Cover openings (A) and (B) of the rear traction motor with tape or other similar material to prevent contamination from dust, dirt, or other foreign materials.



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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 insulated protective gear.

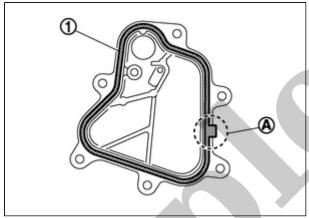


- For each tightening torque, refer to **Exploded View**.
- When the inverter (rear) is installed, never bend the 3-phase bus bar and the excitation bus bar or give impact.

#### **CAUTION:**

Never reuse seal.

When installing gasket 1 to 3-phase bus bar cover, set the tab in the position A as shown in the figure.

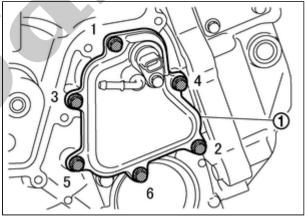


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#### **CAUTION:**

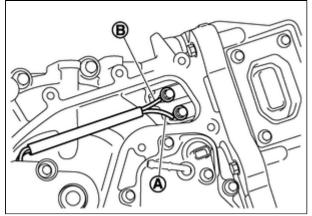
Never reuse gasket.

• When installing 3-phase bus bar cover 1, tighten the mounting bolts to the specified torque in the order shown in the figure after temporarily tightening each bolt.



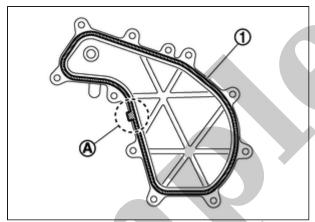
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• When installing the excitation wiring harness terminals onto the excitation bus bar, install the red harness terminal (Ex +) A onto the lower excitation bus bar, and the blue harness terminal (Ex -) B onto the upper excitation bus bar.



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• When installing gasket 1 to excitation cover, set the tab in the position (A) as shown in the figure.

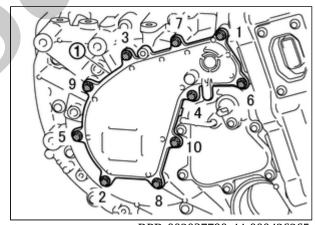


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#### **CAUTION:**

Never reuse gasket.

• When installing excitation cover 1, tighten the mounting bolts to the specified torque in the order shown in the figure after temporarily tightening each bolt.



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• Replace rear traction motor stator temperature sensor joint connector, if rear traction motor stator temperature sensor joint connector is removed from 3-phase bus bar cover.

#### **CAUTION:**

- Never reuse rear traction motor stator temperature sensor joint connector.
- Apply ATF (Genuine NISSAN Matic S) to O-ring.
- Replace air breather hose, if air breather hose is removed from 3-phase bus bar cover.

#### **CAUTION:**

Never reuse air breather hose.

• Replace breather, if breather is removed from excitation cover.

#### **CAUTION:**

- Never reuse breather.
- Check that the O-ring is securely installed before installing the breather.
- When installing, never incline breather.
- Insert breather straight so that the difference in level of the breather surface and excitation cover surface is 0.55 mm (0.0217 in) or less.
- After all the installation is completed, perform inspection after installation. Refer to <u>Inspection</u>.
- When the inverter (rear) is replaced, perform adjustment after installation. Refer to Adjustment.

## INSPECTION AFTER INSTALLATION

After installing the inverter (rear) to the vehicle, perform the following equipotential inspection and confirm that it is less than the standard value.

- Between inverter (rear) and other high voltage system
- Between inverter (rear) and vehicle body (bolt of body ground)

#### **WARNING:**



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



Standard : Less than  $0.1 \Omega$ 

If result deviates from standard values, check that no paint, oil, dirt, or other substance is adhering to bolts or conductive mounting parts. If any such substance is adhering, clean the surrounding area and remove the substance.

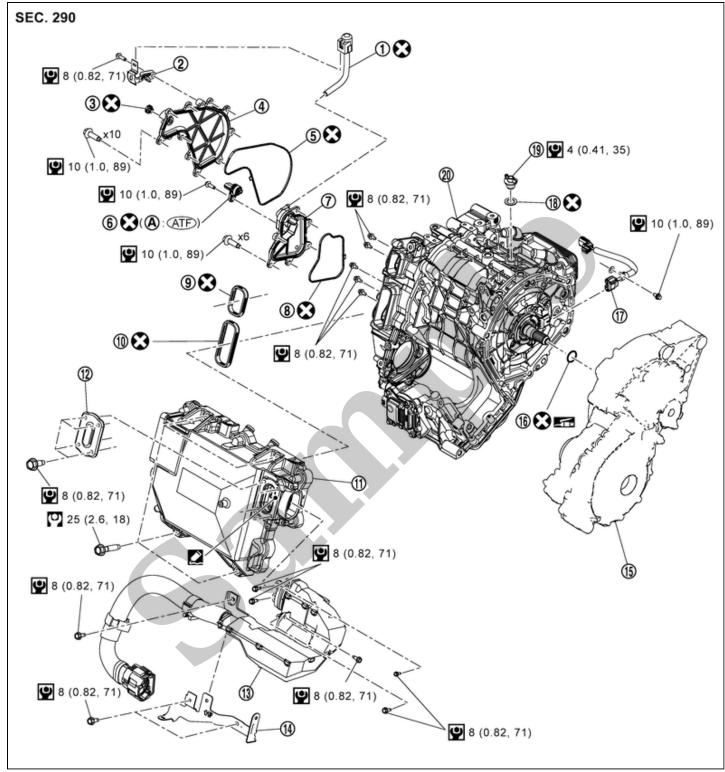


# ADJUSTMENT AFTER INSTALLATION

When the inverter (rear) is replaced, perform required procedure. Refer to Work Procedure.



# **INVERTER (REAR) AND REAR TRACTION MOTOR**



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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						
lack	O-ring								
☑: N·m (kg-m, in-lb)									

: N·m (kg-m, ft-lb)

X: Always replace after every disassembly.

(Genuine NISSAN Matic S).

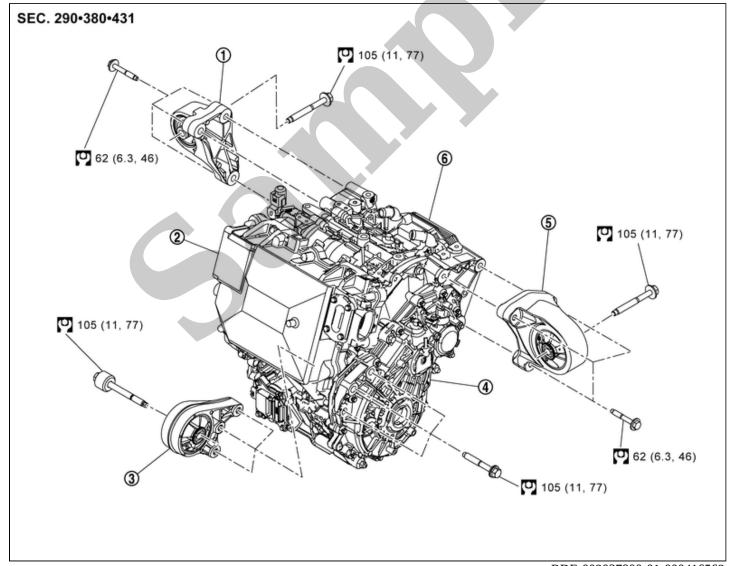
: Apply lithium-based grease including molybdenum disulphide.

Apply Genuine Silicone RTV or equivalent. Refer to <u>HOW TO USE THIS MANUAL</u>: Recommended Chemical Products and <u>Sealants</u>.



The tightening torque of the plug (19) is a reference.

## REAR TRACTION MOTOR MOUNTING



RDE-002037800-01-000416562

1	Rear motor mounting insulator assembly (right side)	(0)	Inverter (rear)	(3)	Rear motor mounting insulator assembly (front side)
4	Rear final drive assembly		Rear motor mounting insulator assembly (left side)	6	Rear traction motor assembly

