# 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.

## 2009 NISSAN Maxima OEM Service and Repair Workshop Manual

Go to manual page

1. Press and hold the power switch for at least 2 seconds to turn OFF high voltage system and check that charge indicator is OFF.

**NOTE:**
**When high voltage system is ON, charge indicator flashes green every 1 second.**

2. After turning OFF high voltage system, open driver's door, get out the car, close driver's door, and wait at least 5 minutes.

**CAUTION:**

- **Do not operate vehicle such as door lock operation or door open/close while waiting because accessory power is turned ON by auto ACC function.**

  **If vehicle is operated, wait at least 5 minutes after that.**

- **Check 12V battery voltage is at least 11 V.**

3. Power switch ON.

4. Check DTC. If DTC is detected, erase DTC.

>>

END

# Symptom Description



- The driving range is shorter than before.
- Sudden change (Decrease/increase) in possible travel distance indicated on the combination meter.

# Diagnosis Procedure

SIEMD-7377095

## 1. CHECK AVERAGE ELECTRICITY CONSUMPTION

Check with the customer to see if the average electricity consumption is lower than before.

Is the average electricity consumption lower than before?

YES>>

Perform symptom diagnosis "Low electrical consumption". Refer to Diagnosis Procedure.

NO>>

GO TO 2.

## 2. CHECK LI-ION BATTERY TEMPERATURE WHILE CHARGING

Check Li-ion battery temperature while charging.

Is the Li-ion battery temperature low?

YES>>

Charge Li-ion battery with normal room temperature.

NO>>

GO TO 3.

## 3. CHECK LI-ION BATTERY CHARGE LEVEL GAUGE

Check the indication of the Li-ion battery charge level gauge.

Is "—" shown?

YES>>

GO TO 5.

NO>>

GO TO 4.

## 4. DISCHARGE OF LI-ION BATTERY

1. Set the vehicle to READY.
2. Set the vehicle, according to the following conditions.

| | |
|---|---|
| A/C set temperature | : Full hot |
| A/C fan speed | : Maximum speed |
| A/C air outlet | : Defroster |
| Headlamp | : High beam ON |
| Door glass | : Full open |

3. Let Li-ion battery discharge until Li-ion battery charge level gauge shows "—".

>>

GO TO 5.

## 5. CHARGE OF LI-ION BATTERY

1. Charge Li-ion battery by normal charge until the level reaches full charge.
2. After completion of normal charge, check that the indication of Li-ion battery charge level gauge shows 100 %.

>>

GO TO 6.

## 6. PERFORM DTC CONFIRMATION PROCEDURE

With CONSULT

1. Power switch ON and wait for 1 minute or more.
2. Power switch OFF.
3. Power switch ON and wait for 1 minute or more.
4. Check “Self Diagnostic Result” of “HIGH VOLTAGE BATTERY” and “HIGH VOLTAGE BATTERY 2”.
5. Check that DTC is detected.

Is any DTC detected?

YES>>

Perform diagnosis on the detected DTC. Refer to DTC Index.

NO>>

GO TO 7.

## 7. CHECK LI-ION BATTERY CHARGE LEVEL.

Check Li-ion battery charge level on combination meter.

Is Li-ion battery charge level low?

YES>>

Explain the customer that the symptom is due to a decrease in Li-ion battery charge level.

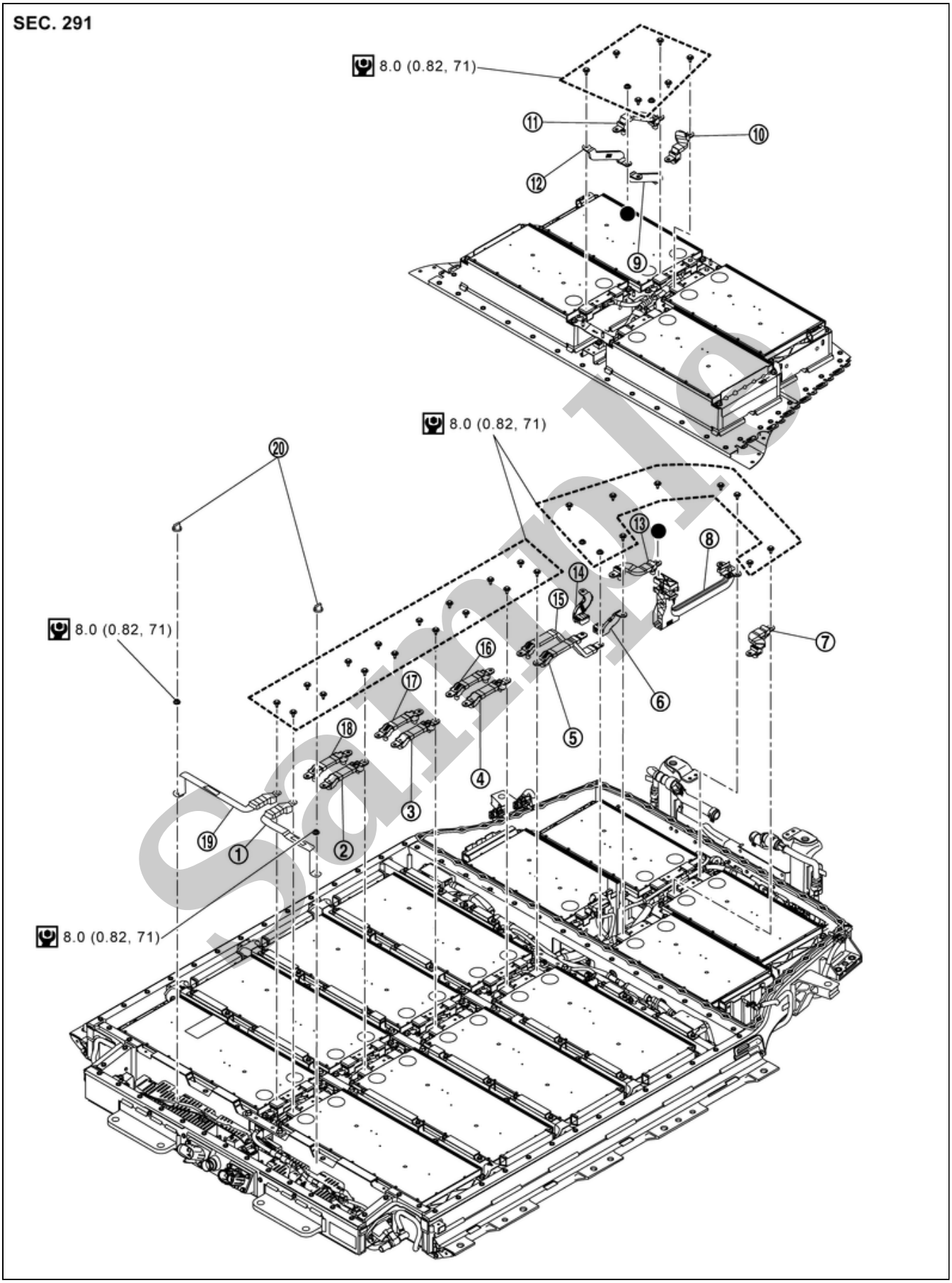
NO>>

Li-ion battery is normal. Electricity consumption may be worse. Perform symptom diagnosis “Low electricity consumption”. Refer to Diagnosis Procedure.

# Exploded View

RDE-001999668

DISASSEMBLY

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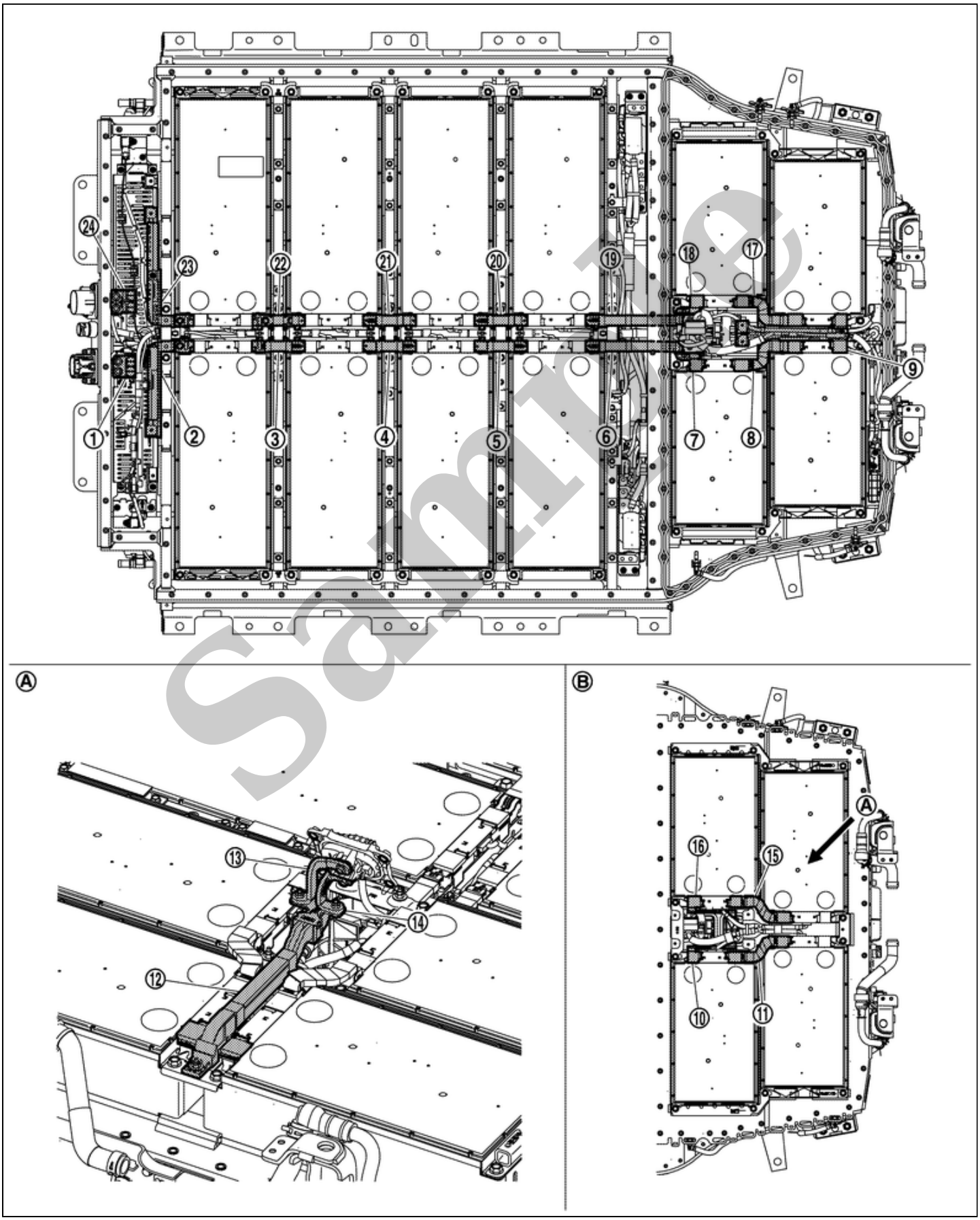
| | | | | | |
|---|---|---|---|---|---|
| ① | Busbar 2 | ② | Busbar 3 | ③ | Busbar 4 |
| ④ | Busbar 5 | ⑤ | Busbar 6 | ⑥ | Busbar 7 |
| ⑦ | Busbar 8 | ⑧ | Busbar 9 | ⑨ | Busbar 10 |

| | | | | | |
|---|---|---|---|---|---|
| ⑩ | Busbar 11 | ⑪ | Busbar 15 | ⑫ | Busbar 16 |
| ⑬ | Busbar 17 | ⑭ | Busbar 18 | ⑮ | Busbar 19 |
| ⑯ | Busbar 20 | ⑰ | Busbar 21 | ⑱ | Busbar 22 |
| ⑲ | Busbar 23 | ⑳ | Nut cap | | |
| | : N·m (kg-m, in-lb) | | | | |

BUSBAR LAYOUT



| | | | | | |
|---|---|---|---|---|---|
| ① | Busbar 1 | ② | Busbar 2 | ③ | Busbar 3 |
| ④ | Busbar 4 | ⑤ | Busbar 5 | ⑥ | Busbar 6 |
| ⑦ | Busbar 7 | ⑧ | Busbar 8 | ⑨ | Busbar 9 |
| ⑩ | Busbar 10 | ⑪ | Busbar 11 | ⑫ | Busbar 12 |
| ⑬ | Busbar 13 | ⑭ | Busbar 14 | ⑮ | Busbar 15 |
| ⑯ | Busbar 16 | ⑰ | Busbar 17 | ⑱ | Busbar 18 |
| ⑲ | Busbar 19 | ⑳ | Busbar 20 | ㉑ | Busbar 21 |
| ㉒ | Busbar 22 | ㉓ | Busbar 23 | ㉔ | Busbar 24 |
| Ⓐ | : Around Service bracket | | | | |
| Ⓑ | : Rear module stack 2nd floor | | | | |

RPR-001999659

**DANGER:**

**Because hybrid vehicles and electric vehicles contain a high voltage battery, there is a risk of electric shock, electric leakage, or similar accidents if the vehicle is 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 shut off the high voltage circuits before performing inspection or maintenance of high voltage system harnesses and parts.**
- **Be sure to put the removed service plug in pocket and carry it or store it in a tool box or other container so that another person does not accidentally connect it while work is in progress.**
- **Be sure to put on insulating protective gear before beginning work on the high voltage system.**
- **Clearly identify the persons responsible for high voltage work and ensure that other persons do not touch the vehicle. When not working, cover high voltage components with an anti-static cover sheet or similar item to prevent contact with other persons.**
- **Refer to PRECAUTIONS FOR HIGH VOLTAGE : Precautions.**
- **If the battery pack is to be disassembled, be sure to remove the Li-ion battery controller for preventing electric shock, fire, and damage to parts.**

**CAUTION:**

**There is the possibility of a malfunction occurring if the vehicle is changed to READY status while the service plug is removed. Therefore do not change the vehicle to READY status unless instructed to do so in the Service Manual.**

# ENVIRONMENT FOR LI-ION BATTERY DISASSEMBLY WORK

1 Must be an indoor environment.

- The environment must utilize a shutter or other means to shut out the outside environment and prevent rain, snow, dust, or other substances from entering.
- The environment must not cause the intrusion of sweat during work, or cause condensation to occur due to high temperature or humidity.

2 Metal powder, grease, and other foreign substances must not enter.

- The indoor environment must also prevent metal powder, grease, and other foreign substances from entering due to maintenance performed on other vehicles and other sources during disassembly work.
- If there is a risk of the above substances entering, take appropriate countermeasures, such as use of a vinyl curtain or an equivalent to shut out the outside environment.

3 The floor must be dry.

- The floor must not be wet as a result of factors such as vehicle entry during rain or snow.

4 Work space

- The work space must be approximately the size of one entire vehicle.
- Take appropriate countermeasures so that persons other than the operator do not enter the work space, such as by placing signs indicating that disassembly work is in progress.

5 Standard fire fighting equipment

- Always place a standard fire fighting equipment in the disassembly work area.
- Depending on type of fire (vehicle or battery) use standard fire fighting equipment (water or extinguisher).

## Busbar 1 and Busbar 24:

Refer to Disassembly & Assembly.

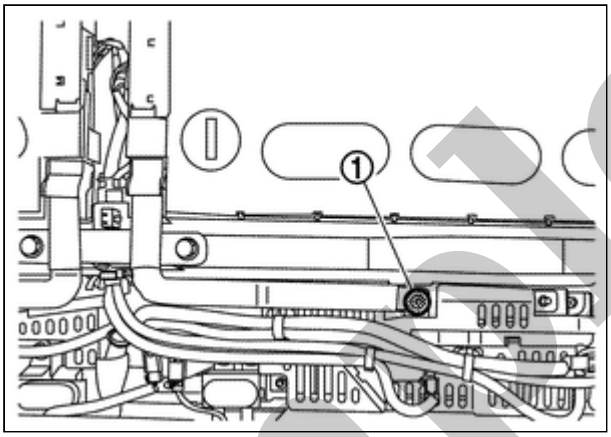
## Busbar 12 to Busbar 14:

Refer to Disassembly & Assembly.

## busbar 2 and Busbar 23

### DISASSEMBLY

1 Remove nut cap ①.

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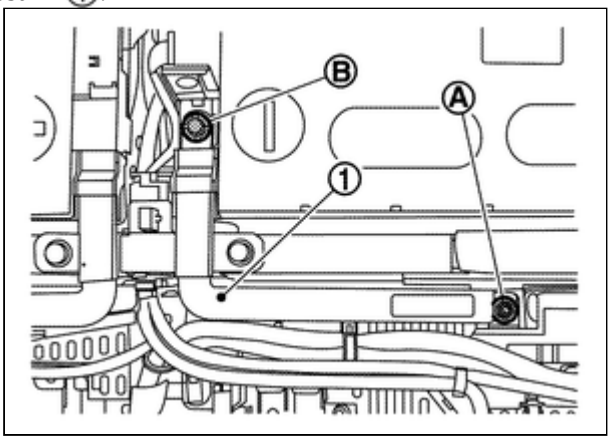
**WARNING:**

**To prevent electric shock, wear insulated protective gear and use insulated tools.**

**NOTE:**

**The figure shows busbar 2.**

2 Remove nut Ⓐ and then remove busbar 2 ①.

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**WARNING:**

**To prevent electric shock, wear insulated protective gear and use insulated tools.**