

# 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.

2007 NISSAN Tiida/Versa OEM Service and Repair Workshop Manual

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#### 1. CHECK FFD

## **(H)**With CONSULT

- 1. Power switch ON.
- 2. Confirm "FFD" mode of detected DTC and record the following items.
  - "Total battery voltage"
  - "Maximum cell voltage"
  - "Maximum voltage cell No"
  - "Minimum cell voltage"
  - "Minimum voltage cell No"

>>

#### GO TO 2.

#### 2. CHECK CELL VOLTAGE

- 1. Average cell voltage is calculated from recorded "Total battery voltage".
  - Average cell voltage = Total battery voltage / 96
- 2. The followings are calculated from average cell voltage, "maximum cell voltage" and "minimum cell voltage".
  - "A" = "Maximum cell voltage" Average cell voltage
  - "B" = Average cell voltage "Minimum cell voltage"



For comparison of cell, module, and cell controller, Refer to Component Description.

Compare calculated values of "A" and "B"

"A" > "B">>

Replace module which includes cell corresponding to "maximum voltage cell number", and then GO TO 3.

- Refer to <u>Disassembly & Assembly</u>.
- Refer to Disassembly & Assembly.

"A" **≤** "B">>

Replace module which includes cell corresponding to "minimum voltage cell number", and then GO TO 3.

- Refer to <u>Disassembly & Assembly</u>.
- Refer to Disassembly & Assembly.

#### 3. ASSEMBLY AND INSTALLATION OF LI-ION BATTERY

Assemble and install Li-ion battery.

#### 4. PERFORM DTC CONFIRMATION PROCEDURE

- **(H)**With CONSULT
  - 1. Power switch ON.
  - 2. Erase DTC.



Erase DTC in order first "HIGH VOLTAGE BATTERY 2" then next "HIGH VOLTAGE BATTERY".

- 3. Power switch OFF and wait at least 5 minute.
- 4. Perform DTC confirmation procedure again. Refer to Confirmation Procedure.

#### Is P1B01-62 detected?

YES>>

GO TO 1.

NO>>

INSPECTION END



# DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detection condition	
P1B01	F1	Cell voltage circuit	Diagnosis condition	Power switch ON
			Signal (terminal)	Cell voltage
			Threshold	When cell voltage exceeds available voltage range.
			Diagnosis delay time	2 seconds or less

# **POSSIBLE CAUSE**

- Cell voltage detection circuit
- Cell (module)

# **FAIL-SAFE**

Pattern A: No driving, Charge stop, and EV system warning lamp illuminate



#### 1. PERFORM DTC CONFIRMATION PROCEDURE

## (I) With CONSULT

- 1. Power switch ON and wait at least 2 seconds.
- 2. Check "Self diagnosis Results" of "HIGH VOLTAGE BATTERY" and "HIGH VOLTAGE BATTERY 2".

#### Is P1B01-F1 detected?

YES>>

Refer to DTC Diagnosis Procedure.

NO-1>>

To check malfunction symptom before repair: Refer to Intermittent Incident.

NO-2>>

Confirmation after repair: INSPECTION END



#### 1. CHECK MAXIMUM VOLTAGE CELL NUMBER

## **(H)**With CONSULT

- 1. Power switch ON.
- 2. Check "FFD" mode of detected DTC and record "Maximum voltage cell No".

>>

#### GO TO 2.

#### 2. CHECK CELL VOLTAGE DETECTION CIRCUIT

Check cell voltage circuit (harness connector between cell controller and module) that is displayed on the recorded "Maximum voltage cell No". Refer to <u>Diagnosis Procedure</u>.



For comparison of cell, module, and cell controller, Refer to Component Description.

Is the inspection result normal?

YES>>

GO TO 3.

NO>>

Repair or replace malfunctioning parts.

#### 3. CHECK CELL VOLTAGE

Check cell voltage that is displayed on the recorded "Maximum voltage cell No".



For comparison of cell, module, and cell controller, Refer to Component Description.

Cell voltage is 4.3 V or more>>

Replace corresponding module.

- Refer to Disassembly & Assembly.
- Refer to Disassembly & Assembly

Cell voltage is 4.3 V or less>>

Replace cell controller corresponding to the cell. Refer to Removal & Installation.

# DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detection condition	
P1B01	F2	Cell voltage circuit	Diagnosis condition	Power switch ON
			Signal (terminal)	Cell voltage
			Threshold	When cell voltage falls below available voltage range
			Diagnosis delay time	2 seconds or less

# **POSSIBLE CAUSE**

- Cell voltage detection circuit
- Cell (module)

# **FAIL-SAFE**

Pattern A: No driving, Charge stop, and EV system warning lamp illuminate



#### 1. PERFORM DTC CONFIRMATION PROCEDURE

## (I) With CONSULT

- 1. Power switch ON and wait at least 2 seconds.
- 2. Check "Self diagnosis Results" of "HIGH VOLTAGE BATTERY" and "HIGH VOLTAGE BATTERY 2".

#### Is P1B01-F2 detected?

YES>>

Refer to DTC Diagnosis Procedure.

NO-1>>

To check malfunction symptom before repair: Refer to Intermittent Incident.

NO-2>>

Confirmation after repair: INSPECTION END



#### 1. CHECK MAXIMUM VOLTAGE CELL NUMBER

## **(H)**With CONSULT

- 1. Power switch ON.
- 2. Check "FFD" mode of detected DTC and record "Minimum voltage cell No".

>>

GO TO 2.

#### 2. CHECK CELL VOLTAGE DETECTION CIRCUIT

Check cell voltage circuit (harness connector between cell controller and module) that is displayed on the recorded "Minimum voltage cell No". Refer to <u>Diagnosis Procedure</u>.



For comparison of cell, module, and cell controller, Refer to Component Description.

Is the inspection result normal?

YES>>

GO TO 3.

NO>>

Repair or replace malfunctioning parts.

#### 3. CHECK CELL VOLTAGE

Check cell voltage that is displayed on the recorded "Minimum voltage cell No".



For comparison of cell, module, and cell controller, Refer to Component Description.

Cell voltage is 1.0 V or less >>

Replace corresponding module.

- Refer to Disassembly & Assembly.
- Refer to Disassembly & Assembly.

Cell voltage is 1.0 V or more >>

Replace cell controller corresponding to the cell.Refer to Removal & Installation.

# **DTC DETECTION LOGIC**

DTC		CONSULT screen terms	DTC detection condition		
P1BA0	16	Power supply voltage	Diagnosis condition	Power switch ON	
			Signal (terminal)	LBC power supply voltage	
			Threshold	When power supply voltage of LBC falls below the specified voltage	
			Diagnosis delay time	2 seconds or less	

### **POSSIBLE CAUSE**

LBC power supply circuit

# **FAIL-SAFE**

Pattern B: Driving output power limit, Charge stop, and EV system warning lamp illuminate

