

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 Sentra OEM Service and Repair Workshop Manual

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DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detection condition	
P2E2B	1C	Drive Motor A Excitation Current	Diagnosis condition	At inverter (front) start
			Signal	—
			Threshold	An excitation module error was detected.
			Diagnosis delay time	Within 1 second

POSSIBLE CAUSE

Inverter (front)

FAIL-SAFE

Control of the front traction motor stops

1. PREPARATION BEFORE OPERATION

If another "Confirmation Procedure" was performed immediately before this task, always power switch OFF exit the vehicle and close all doors (including the back door), and wait for at least 60 seconds until the combination meter turns off before starting the next test.

CAUTION:

While waiting, never operate the vehicle such as locking, opening, and closing doors. Violation of this caution results in the activation of ACC power supply according to the auto ACC function.

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2. PERFORM THE DTC CONFIRMATION PROCEDURE

 With CONSULT

1. Power switch ON and wait at least 10 seconds.
2. Check the DTC.

Is "P2E2B-1C 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. REPLACEMENT OF THE INVERTER (FRONT)

Replace the inverter (front). Refer to [INVERTER \(FRONT\) : Removal & Installation](#).

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END

DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detection condition	
U2143	82	CAN communication error (VCM/HCM)	Diagnosis condition	READY state
			Signal	EV system CAN communication signal
			Threshold	Any of the following was detected. - CAN signal cannot be received from the VCM. - There is an error in the CAN signal received from the VCM.
			Diagnosis delay time	Within 10 seconds

POSSIBLE CAUSE

- Inverter (front)
- VCM
- CAN communications line [between inverter (front) and VCM]

FAIL-SAFE

Vehicle stops (torque 0 Nm), or the driving torque of the front traction motor is limited, or is not limited.

1. PREPARATION BEFORE OPERATION

If another "Confirmation Procedure" was performed immediately before this task, always power switch OFF exit the vehicle and close all doors (including the back door), and wait for at least 60 seconds until the combination meter turns off before starting the next test.

CAUTION:

While waiting, never operate the vehicle such as locking, opening, and closing doors. Violation of this caution results in the activation of ACC power supply according to the auto ACC function.

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2. PERFORM THE DTC CONFIRMATION PROCEDURE

 With CONSULT

1. Set the vehicle to READY and wait for at least 10 seconds.
2. Check the DTC.

Is "U2143-82 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

DTC Diagnosis Procedure

SIEMD-7197765

Perform diagnosis of the CAN communication system. Refer to [Trouble Diagnosis Flow Chart](#).

Sample

DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detection condition	
U2143	83	CAN communication error (VCM/HCM)	Diagnosis condition	READY state
			Signal	EV system CAN communication signal
			Threshold	Any of the following was detected. - CAN signal cannot be received from the VCM. - There is an error in the CAN signal received from the VCM.
			Diagnosis delay time	Within 10 seconds

POSSIBLE CAUSE

- Inverter (front)
- VCM
- CAN communications line [between inverter (front) and VCM]

FAIL-SAFE

Vehicle stops (torque 0 Nm), or the driving torque of the front traction motor is limited, or is not limited.

1. PREPARATION BEFORE OPERATION

If another "Confirmation Procedure" was performed immediately before this task, always power switch OFF exit the vehicle and close all doors (including the back door), and wait for at least 60 seconds until the combination meter turns off before starting the next test.

CAUTION:

While waiting, never operate the vehicle such as locking, opening, and closing doors. Violation of this caution results in the activation of ACC power supply according to the auto ACC function.

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2. PERFORM THE DTC CONFIRMATION PROCEDURE

 With CONSULT

1. Set the vehicle to READY and wait for at least 10 seconds.
2. Check the DTC.

Is "U2143-83 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

DTC Diagnosis Procedure

SIEMD-7197768

Perform diagnosis of the CAN communication system. Refer to [Trouble Diagnosis Flow Chart](#).

Sample