

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 Titan King Cab OEM Service and Repair Workshop Manual

[Go to manual page](#)

DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detection condition	
U2143	87	CAN communication error (VCM/HCM)	Diagnosis condition	Power switch ON
			Signal (terminal)	CAN communication signal
			Threshold	When data error of CAN communication signal from VCM is detected
			Diagnosis delay time	More than 2 seconds continuously

POSSIBLE CAUSE

- CAN communication circuit
- VCM

FAIL-SAFE

Pattern D: EV system warning lamp illuminate

1. PERFORM DTC CONFIRMATION PROCEDURE

 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 U2143-87 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

Sample

1. CAN COMMUNICATION SYSTEM DIAGNOSIS

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

Is the inspection result normal?

YES>>

[GO TO 2.](#)

NO>>

Repair or replace malfunctioning parts.

2. PERFORM DTC CONFIRMATION PROCEDURE AGAIN

 With CONSULT

1. Power switch ON.
2. Erase DTC.
3. Perform DTC confirmation procedure again. Refer to [Confirmation Procedure](#).

Is U2143-87 detected?

YES>>

Replace VCM. Refer to [VCM : Removal & Installation](#).

NO>>

INSPECTION END

DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detection condition	
P1B20	11	Relay 4 control circuit	Diagnosis condition	Power switch ON
			Signal (terminal)	Relay control signal
			Threshold	When short circuit of quick charge relay controller circuit.
			Diagnosis delay time	2 seconds or less

POSSIBLE CAUSE

- Quick charge relay controller circuit
- Quick charge relay controller (junction box)

FAIL-SAFE

Pattern E: Quick charge stop and EV system warning lamp illuminate

1. PERFORM DTC CONFIRMATION PROCEDURE

 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 P1B20-11 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

Sample

1. CHECK QUICK CHARGE RELAY CONTROLLER CIRCUIT

Check quick charge relay controller circuit. Refer to [Diagnosis Procedure](#).

Is the inspection result normal?

YES>>

Replace junction box. Refer to [Disassembly & Assembly](#). (Battery current sensor)

NO>>

Repair or replace malfunctioning parts.

Sample

DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detection condition	
P1B20	15	Relay 4 control circuit	Diagnosis condition	Power switch ON
			Signal (terminal)	Relay control signal
			Threshold	When open circuit of quick charge relay controller circuit.
			Diagnosis delay time	2 seconds or less

POSSIBLE CAUSE

- Quick charge relay controller circuit
- Quick charge relay controller (junction box)

FAIL-SAFE

Pattern E: Quick charge stop and EV system warning lamp illuminate

1. PERFORM DTC CONFIRMATION PROCEDURE

 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 P1B20-15 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

Sample

1. CHECK QUICK CHARGE RELAY CONTROLLER CIRCUIT

Check quick charge relay controller circuit. Refer to [Diagnosis Procedure](#).

Is the inspection result normal?

YES>>

Replace battery junction box. Refer to [Disassembly & Assembly](#). (Built-in battery current sensor)

NO>>

Repair or replace malfunctioning parts.

Sample