

# 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.

2011 NISSAN Maxima OEM Service and Repair Workshop Manual

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# **1. CHECK CAN COMMUNICATION CIRCUIT**

Perform trouble diagnosis for CAN communication circuit. Refer to Trouble Diagnosis Flow Chart.

Is the inspection result normal?

YES>>

<u>GO TO 2</u>.

NO>>

Repair or replace error-detected parts.

### 2. PERFORM SELF-DIAGNOSIS OF LBC

(I) With CONSULT

Check self-diagnostic result in "HVBATTERY".

Is DTC detected?

YES>>

Perform diagnosis for detected DTC. Refer to DTC Index(66kWh LI-ION BATTERY), DTC Index(91kWh LI-ION BATTERY).

NO>>

#### <u>GO TO 3</u>.

### **3. PERFORM CONFIRMATION PROCEDURE AGAIN**

1. Erase DTC.

2. Perform DTC confirmation procedure again. Refer to Confirmation Procedure.

Is DTC P1693-49 detected again?

YES>>

Replace VCM. Refer to <u>VCM : Removal & Installation</u>.

NO>>

INSPECTION END

# DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detecting condition		
	87	Communication error	Diagnosis condition	Power switch ON	
P1693			Signal	CAN communication	
			Threshold	Signal from LBC cannot be received	
			Detection time	More than 2 seconds	

### **POSSIBLE CAUSE**

- CAN communication circuit
- LBC
- VCM

# FAIL-SAFE

- Quick charge is prohibited
- Normal charge is prohibited
- Traction motor output is cut

### **1. PRECONDITIONING**

1. Press the power switch for at least 2 seconds to turn the high voltage system OFF and then check that the charging status indicator is not illuminated.

# **WNOTE:**

When the high voltage system is turned ON, the charging status indicator blinks green with a frequency of 1 second.

2. After the high voltage system is turned OFF, open the driver's side door, get out of the vehicle, close the driver's side door and wait for at least 5 minutes.

#### **CAUTION:**

• Since the auto ACC function causes the accessory power to be turned ON, do not perform any vehicle operation including locking the doors or opening and closing of the doors during the standby state.

If an operation is performed, wait an additional 5 minutes from that time.

• Check that 12V battery voltage is 11 V or more.

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#### <u>GO TO 2</u>.

### 2. PERFORM DTC CONFIRMATION PROCEDURE

(II) With CONSULT

- 1. Power switch ON and wait at least 10 seconds.
- 2. Check self-diagnostic result in "EV/HEV".

Is DTC detected?

YES>>

Refer to <u>DTC Diagnosis Procedure</u>.

NO-1>>

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

NO-2>>

Confirmation after repair: INSPECTION END

# **1. CHECK CAN COMMUNICATION CIRCUIT**

Perform trouble diagnosis for CAN communication circuit. Refer to Trouble Diagnosis Flow Chart.

Is the inspection result normal?

YES>>

<u>GO TO 2</u>.

NO>>

Repair or replace error-detected parts.

### 2. CHECK DTC

(I) With CONSULT

Check self-diagnostic result in "EV/HEV".

Is CAN error other than DTC P1693-87 detected?

YES>>

<u>GO TO 3</u>.

NO>>

<u>GO TO 4</u>.

### **3. REPLACE VCM**

(I) With CONSULT

- 1. Replace VCM. Refer to VCM : Removal & Installation.
- 2. Perform DTC confirmation procedure again. Refer to Confirmation Procedure.

#### Is DTC P1693-87 detected again?

YES>>

Replace Li-ion battery controller. Refer to <u>Removal & Installation</u>(66kWh LI-ION BATTERY), <u>Removal & Installation</u>(91kWh LI-ION BATTERY).

NO>>

INSPECTION END

### **4. REPLACE LBC**

#### 🕒 With CONSULT

- 1. Replace LBC. Refer to <u>Removal & Installation(66kWh LI-ION BATTERY)</u>, <u>Removal & Installation(91kWh LI-ION BATTERY</u>).
- 2. Power switch ON and erase DTC.
- 3. Perform DTC confirmation procedure again. Refer to Confirmation Procedure.

#### Is DTC P1693-87 detected again?

YES>>

Replace VCM. Refer to <u>VCM : Removal & Installation</u>.

NO>>

INSPECTION END

# **DTC DETECTION LOGIC**

DTC		CONSULT screen terms	DTC detecting condition		
P1694 4		Communication error	Diagnosis condition	Power switch ON	
	49		Signal	CAN communication	
			Threshold	An internal error signal from Li-ion battery controller 2 is received	
			Detection time	—	

### **POSSIBLE CAUSE**

- CAN communication circuit
- LBC
- VCM

### FAIL-SAFE

- Quick charge is prohibited
- Normal charge is prohibited
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# **1. PRECONDITIONING**

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2. After the high voltage system is turned OFF, open the driver's side door, get out of the vehicle, close the driver's side door and wait for at least 5 minutes.

#### **CAUTION:**

• Since the auto ACC function causes the accessory power to be turned ON, do not perform any vehicle operation including locking the doors or opening and closing of the doors during the standby state.

If an operation is performed, wait an additional 5 minutes from that time.

• Check that 12V battery voltage is 11 V or more.

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#### <u>GO TO 2</u> .

### 2. PERFORM DTC CONFIRMATION PROCEDURE

(II) With CONSULT

- 1. Power switch ON and wait at least 10 seconds.
- 2. Check self-diagnostic result in "EV/HEV".

Is DTC detected?

YES>>

Refer to <u>DTC Diagnosis Procedure</u>.

NO-1>>

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

NO-2>>

Confirmation after repair: INSPECTION END

# **1. CHECK CAN COMMUNICATION CIRCUIT**

Perform trouble diagnosis for CAN communication circuit. Refer to Trouble Diagnosis Flow Chart.

Is the inspection result normal?

YES>>

<u>GO TO 2</u>.

NO>>

Repair or replace error-detected parts.

### 2. PERFORM SELF-DIAGNOSIS OF LBC

(I) With CONSULT

Check self-diagnostic result in "HVBATTERY".

Is DTC detected?

YES>>

Perform diagnosis for detected DTC. Refer to DTC Index(66kWh LI-ION BATTERY), DTC Index(91kWh LI-ION BATTERY).

NO>>

#### <u>GO TO 3</u>.

### **3. PERFORM CONFIRMATION PROCEDURE AGAIN**

1. Erase DTC.

2. Perform DTC confirmation procedure again. Refer to Confirmation Procedure.

Is DTC P1694-49 detected again?

YES>>

Replace VCM. Refer to <u>VCM : Removal & Installation</u>.

NO>>

INSPECTION END

# DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detecting condition		
	87	Communication error	Diagnosis condition	Power switch ON	
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### **POSSIBLE CAUSE**

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