

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.

2012 NISSAN Armada 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>>

INSPECTION END

NO>>

Repair or replace error-detected parts.

Sample

DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detecting condition	
U2342	87	Controller area network communication error (Inverter motor generator/motor generator)	Diagnosis condition	Power switch ON
			Signal	<ul style="list-style-type: none">CAN communication signalEV system CAN 1 circuit signal
			Threshold	Communication error
			Detection time	30 seconds

POSSIBLE CAUSE

- CAN communication circuit
- EV system CAN 1 circuit

FAIL-SAFE

Not applicable

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.

**NOTE:**

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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2. PERFORM DTC CONFIRMATION PROCEDURE

 With CONSULT

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

Is DTC 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 CAN COMMUNICATION CIRCUIT

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

Is the inspection result normal?

YES>>

INSPECTION END

NO>>

Repair or replace error-detected parts.

Sample

DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detecting condition	
POAE1	73	High voltage battery precharge contactor	Diagnosis condition	In any of the cases below <ul style="list-style-type: none"> • While driving (Vehicle speed is at least 30 km/h) • During charging completion
			Signal	CAN communication
			Threshold	When quick charge relay OFF is requested the DC inlet voltage is more than 60V
			Detection time	More than 0.8 seconds

POSSIBLE CAUSE

- Quick charge relay drive harness
- Quick charge relay (Stuck in ON position)
- VCM

FAIL-SAFE

Quick charge is prohibited

Sample

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.

**NOTE:**

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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2. PERFORM DTC CONFIRMATION PROCEDURE

 With CONSULT

1. Set the vehicle to READY.
2. Drive in D range with a vehicle speed of at least 30 km/h for at least 10 seconds.
3. Stop the vehicle.
4. Check self-diagnostic result in "EV/HEV".

Is DTC 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 QUICK CHARGE RELAY 1 AND 2 CIRCUITS-1

1. Power switch OFF.
2. Disconnect VCM harness connector and Li-ion battery harness connector.
3. Check for continuation between VCM harness connector and Li-ion battery harness connector.

+		-		Continuation
VCM		Li-ion battery		
Connector	Terminal	Connector	Terminal	Existing
E47	91	E9	2	
	92		8	

4. Also check harness for short to power supply and for short to ground.

Is the inspection result normal?

YES>>

[GO TO 2](#) .

NO>>

Repair or replace error-detected parts.

2. CHECK QUICK CHARGE RELAY 1 AND 2 CIRCUITS-2

Check quick charge relay 1 and 2 circuits. Refer to [Diagnosis Procedure](#)(66kWh LI-ION BATTERY), [Diagnosis Procedure](#)(91kWh LI-ION BATTERY).

Is the inspection result normal?

YES>>

[GO TO 3](#).

NO>>

Repair or replace error-detected parts.

3. PERFORM CONFIRMATION PROCEDURE AGAIN

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

Is DTC P0AE1-73 detected again?

YES>>

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

NO>>

INSPECTION END

DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detecting condition	
P0AE2	72	High voltage battery precharge contactor	Diagnosis condition	During quick charge
			Signal	—
			Threshold	After quick charge relay ON is requested the quick charge port voltage does not become more than 60V
			Detection time	GBT: more than 3 seconds CHAdEMO: more than 1 second

POSSIBLE CAUSE

- Quick charge relay drive harness
- Quick charge relay is stuck in OFF position
- VCM

FAIL-SAFE

Quick charge is prohibited

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.

**NOTE:**

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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2. PERFORM DTC CONFIRMATION PROCEDURE

 With CONSULT

1. Power switch OFF.
2. Connect the quick charger coupler to the quick charge port.
3. Perform quick charge (charging using the quick charger) for at least 10 seconds.
4. Power switch ON and wait at least 10 seconds.
5. Check self-diagnostic result in "EV/HEV".

Is DTC 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