

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.

2014 Nissan NV2500 HD Service and Repair Manual

[Go to manual page](#)

3. CHECK HIGH VOLTAGE HARNESS-1

1. Disconnect the high voltage junction box high voltage harness connector.
2. Disconnect the inverter (front) high voltage harness connector.
3. Check for continuation of the high voltage harness between the high voltage junction box side connector and the inverter (front) side connector.

High voltage junction box		Inverter (front)		Continuity
Connector	Terminal	Connector	Terminal	
H10	N	H12	N	Existing
	P		P	

Is the inspection result normal?

YES>>

[GO TO 4.](#)

NO>>

Repair or replace error-detected parts.

4. CHECK HIGH VOLTAGE HARNESS-2

1. Disconnect the Li-ion battery high voltage harness connector.
2. Check for continuation of the high voltage harness between the inverter (front) side connector and the Li-ion battery side connector.

Inverter (front)		Li-ion battery		Continuity
Connector	Terminal	Connector	Terminal	
H6	N	H5	37	Existing
	P		38	

Is the inspection result normal?

YES>>

[GO TO 5.](#)

NO>>

Repair or replace error-detected parts.

5. PERFORM DTC CONFIRMATION PROCEDURE AGAIN

 With CONSULT

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

Is DTC P1ABC-16 detected again?

YES>>

Replace DC/DC converter. Refer to [DC/DC CONVERTER : Disassembly & Assembly](#).

NO>>

INSPECTION END

DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detecting condition	
P1ABC	17	High voltage input voltage	Diagnosis condition	READY, AUTO ACC or power switch ON
			Signal	—
			Threshold	The input voltage to the DC/DC converter exceeds 462.5 V
			Detection time	1 second

POSSIBLE CAUSE

- ECU related to EV system
- High voltage harness
- DC/DC converter

FAIL-SAFE

DC/DC converter output is stopped

1. PRECONDITIONING

- Press the power switch OFF with the driver's side door open, get out of the vehicle, close the driver's side door and wait for at least 4 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 while waiting.

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

>>

[GO TO 2.](#)

2. PERFORM DTC CONFIRMATION PROCEDURE

 With CONSULT

1. Erase “self-diagnostic result” in “DC/DC CONVERTER” using CONSULT.
2. Set the vehicle to READY and wait at least 1 second.
3. Check the displayed “INPUT VOLTAGE” in the “DATA MONITOR” of “DC/DC CONVERTER” using CONSULT.

Is it exceeding 462.5 V?

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

WARNING:

Hybrid vehicles and electric vehicles equipped with high voltage batteries may cause an electric shock or a short circuit if handled in an inappropriate way. When you inspect and service a vehicle, follow the work procedure and perform the correct tasks.

WARNING:

- When you inspect and service the high voltage wiring harnesses and components, make sure to remove the service plug in order to shut off the high voltage circuit.
- When you have removed the service plug, be sure to carry it in your pocket, or store it in the tool box in order to keep someone from accidentally connecting it during work.
- When performing high voltage system operation, be sure to wear insulating protective equipment.
- During tasks involving high voltage systems, clarify a person in charge of the tasks and do not let others touch the vehicle. When the vehicle is not being serviced, use protective items such as an electric-proof cover sheet for covering the high voltage components so as to keep someone from accidentally touching the vehicle.
- Refer to [HIGH VOLTAGE PRECAUTIONS : Precautions](#).

CAUTION:

Setting the vehicle to the READY state with the service plug removed may cause malfunctioning. Avoid setting the vehicle to the READY state unless otherwise specified in the service manual.

1. CHECK DTC RELATED TO HIGH VOLTAGE SYSTEM

 With CONSULT

1. Set the vehicle to READY and wait for at least 120 seconds.
2. Check DTC related to high voltage system using CONSULT.

Is DTC related to high voltage system detected?

YES>>

Check the detected DTC.

NO>>

[GO TO 2.](#)

2. PRECONDITIONING

WARNING:

Make sure to perform the procedure below before starting the work.

1. Disconnect the high voltage circuit. Refer to [HOW TO DISCONNECT HIGH VOLTAGE : Precautions](#).
2. Check the voltage in the high voltage circuit. Refer to [CHECK VOLTAGE IN HIGH VOLTAGE CIRCUIT : Precautions](#).

>>

[GO TO 3.](#)

3. CHECK HIGH VOLTAGE HARNESS-1

1. Disconnect the high voltage junction box high voltage harness connector.
2. Disconnect the inverter (front) high voltage harness connector.
3. Check for continuation of the high voltage harness between the high voltage junction box side connector and the inverter (front) side connector.

High voltage junction box		Inverter (front)		Continuity
Connector	Terminal	Connector	Terminal	
H10	N	H12	N	Existing
	P		P	

Is the inspection result normal?

YES>>

[GO TO 4.](#)

NO>>

Repair or replace error-detected parts.

4. CHECK HIGH VOLTAGE HARNESS-2

1. Disconnect the Li-ion battery high voltage harness connector.
2. Check for continuation of the high voltage harness between the inverter (front) side connector and the Li-ion battery side connector.

Inverter (front)		Li-ion battery		Continuity
Connector	Terminal	Connector	Terminal	
H6	N	H5	37	Existing
	P		38	

Is the inspection result normal?

YES>>

[GO TO 5.](#)

NO>>

Repair or replace error-detected parts.

5. PERFORM DTC CONFIRMATION PROCEDURE AGAIN

 With CONSULT

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

Is DTC P1ABC-17 detected again?

YES>>

Replace DC/DC converter. Refer to [DC/DC CONVERTER : Disassembly & Assembly](#).

NO>>

INSPECTION END

DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detecting condition	
P1AA5	A2	Control unit supply voltage	Diagnosis condition	READY, AUTO ACC or power switch ON
			Signal	DC/DC converter internal voltage
			Threshold	DC/DC converter internal voltage is less than 6.1 V
			Detection time	1 second

POSSIBLE CAUSE

- 12 V battery
- Harness and connector
- DC/DC converter

FAIL-SAFE

Not applicable

1. PRECONDITIONING

- Press the power switch OFF with the driver's side door open, get out of the vehicle, close the driver's side door and wait for at least 4 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 while waiting.

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

>>

[GO TO 2.](#)

2. PERFORM DTC CONFIRMATION PROCEDURE

 With CONSULT

1. Erase “self-diagnostic result” in “DC/DC CONVERTER” using CONSULT.
2. Set the vehicle to READY and wait at least 1 second.
3. Check “self-diagnostic result” in “DC/DC CONVERTER” using CONSULT.

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 12V BATTERY

Check 12V battery. Refer to [Work Flow](#).

Is the inspection result normal?

YES>>

[GO TO 2.](#)

NO>>

Replace 12V battery. Refer to [12V BATTERY : Removal & Installation](#).

2. CHECK DC/DC CONVERTER CAN COMMUNICATION LINE

Check DC/DC converter CAN communication line installation condition visually and tactually.

Is the inspection result normal?

YES>>

[GO TO 3.](#)

NO>>

Repair or replace error-detected parts.

3. PERFORM SELF-DIAGNOSIS OF VCM

 With CONSULT

1. Power switch ON.
2. Check “self-diagnostic result” in “EV/HEV” using CONSULT.

Is DTC detected?

YES>>

Perform the trouble diagnosis for the detected DTC.

NO>>

[GO TO 4.](#)

4. CHECK DC/DC CONVERTER OUTPUT VOLTAGE

Check voltage between 12V battery plus terminal and ground.

+		Voltage
12V battery	-	
12V battery plus terminal	Ground	Approximately 13 - 15.5 V

Is the inspection result normal

YES>>

Replace DC/DC converter. Refer to [DC/DC CONVERTER : Disassembly & Assembly](#).

NO>>

[GO TO 5.](#)

5. CHECK DC/DC CONVERTER 12V BATTERY VOLTAGE

+		-	Voltage
DC/DC converter			
Connector	Terminal	Ground	12V battery voltage
H4	7		

YES>>

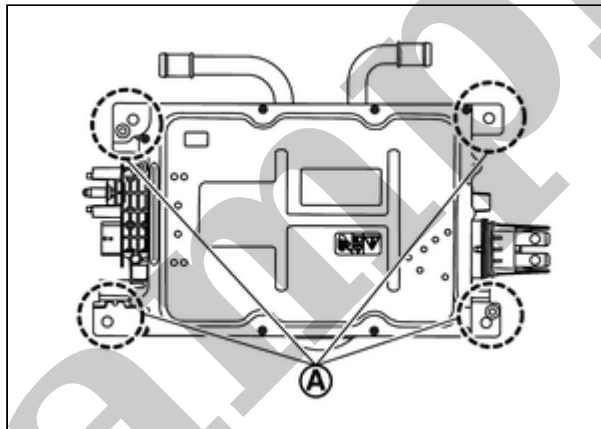
[GO TO 6.](#)

NO>>

[GO TO 7.](#)

6. CHECK DC/DC CONVERTER GROUND CIRCUIT

Check for continuation between the metal parts of the DC/DC converter (A) and ground.



SIEMD-7199149-01-000369205

Is there continuation?

YES>>

Perform trouble cause simulation test. Refer to [Intermittent Incident](#).

NO>>

Repair or replace error-detected parts.

7. CHECK FUSIBLE LINK

Check that the fusible link below is not blown.

Fusible link number	Capacity
A	450 A

Is the fusible link blown?

YES>>

Replace the fusible link after repairing the applicable circuit.

NO>>

[GO TO 8.](#)