

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.

2008 NISSAN X-Trail (T31) OEM Service and Repair Workshop Manual

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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 P1B68-13 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 CELL VOLTAGE DATA MONITOR

 With CONSULT

1. Power switch ON.
2. Select "Data Monitor" of "HIGH VOLTAGE BATTERY".
3. Select "Cell condition 01-96".
4. Check that each cell is abnormal.

Is any cell abnormal?

YES>>

[GO TO 2.](#)

NO>>

Perform intermittent incident. Refer to [Intermittent Incident](#).

2. CHECK CELL VOLTAGE DETECTION CIRCUIT

Check cell voltage circuit (harness connector between cell controller and module) corresponding to that cell is abnormal. Refer to [Diagnosis Procedure](#).



NOTE:

For comparison of cell, module, and cell controller, Refer to [Component Description](#).

Is the inspection result normal?

YES>>

[GO TO 3.](#)

NO>>

Repair or replace malfunctioning parts.

3. CHECK CELL VOLTAGE

Check the voltage of the cell corresponding to abnormal cell number. Refer to [Component Inspection](#).



NOTE:

For comparison of cell, module, and cell controller, Refer to [Component Description](#).

Cell voltage is 0.5 V or more>>

Replace cell controller corresponding to that cell is abnormal. Refer to [Removal & Installation](#).

Cell voltage is 0.5 V or less>>

Replace corresponding module. Refer to [Disassembly & Assembly](#).

DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detection condition	
P1B68	F1	Cell voltage circuit (Module 9)	Diagnosis condition	Power switch ON
			Signal (terminal)	Cell voltage
			Threshold	When cell voltage exceeds available voltage range.
			Diagnosis delay time	2 seconds or less

POSSIBLE CAUSE

- Cell voltage detection circuit
- Cell (module)
- Cell controller

FAIL-SAFE

Not applicable

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 P1B68-F1 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 CELL VOLTAGE DATA MONITOR

 With CONSULT

1. Power switch ON.
2. Select "Data Monitor" of "HIGH VOLTAGE BATTERY".
3. Select "Cell condition 01-96".
4. Check that each cell is abnormal.

Is any cell abnormal?

YES>>

[GO TO 2.](#)

NO>>

Perform intermittent incident. Refer to [Intermittent Incident](#).

2. CHECK CELL VOLTAGE DETECTION CIRCUIT

Check cell voltage circuit (harness connector between cell controller and module) corresponding to that cell is abnormal. Refer to [Diagnosis Procedure](#).



NOTE:

For comparison of cell, module, and cell controller, Refer to [Component Description](#).

Is the inspection result normal?

YES>>

[GO TO 3.](#)

NO>>

Repair or replace malfunctioning parts.

3. CHECK CELL VOLTAGE

Check the voltage of the cell corresponding to abnormal cell number. Refer to [Component Inspection](#).



NOTE:

For comparison of cell, module, and cell controller, Refer to [Component Description](#).

Cell voltage is 0.5 V or more>>

Replace cell controller corresponding to that cell is abnormal. Refer to [Removal & Installation](#).

Cell voltage is 0.5 V or less>>

Replace corresponding module. Refer to [Disassembly & Assembly](#).

DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detection condition	
P1B68	F2	Cell voltage circuit (Module 9)	Diagnosis condition	Power switch ON
			Signal (terminal)	Cell voltage
			Threshold	When cell voltage falls below available voltage range
			Diagnosis delay time	2 seconds or less

POSSIBLE CAUSE

- Cell voltage detection circuit
- Cell (module)
- Cell controller

FAIL-SAFE

Not applicable

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 P1B68-F2 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 CELL VOLTAGE DATA MONITOR

 With CONSULT

1. Power switch ON.
2. Select "Data Monitor" of "HIGH VOLTAGE BATTERY".
3. Select "Cell condition 01-96".
4. Check that each cell is abnormal.

Is any cell abnormal?

YES>>

[GO TO 2.](#)

NO>>

Perform intermittent incident. Refer to [Intermittent Incident](#).

2. CHECK CELL VOLTAGE DETECTION CIRCUIT

Check cell voltage circuit (harness connector between cell controller and module) corresponding to that cell is abnormal. Refer to [Diagnosis Procedure](#).



NOTE:

For comparison of cell, module, and cell controller, Refer to [Component Description](#).

Is the inspection result normal?

YES>>

[GO TO 3.](#)

NO>>

Repair or replace malfunctioning parts.

3. CHECK CELL VOLTAGE

Check the voltage of the cell corresponding to abnormal cell number. Refer to [Component Inspection](#).



NOTE:

For comparison of cell, module, and cell controller, Refer to [Component Description](#).

Cell voltage is 0.5 V or more>>

Replace cell controller corresponding to that cell is abnormal. Refer to [Removal & Installation](#).

Cell voltage is 0.5 V or less>>

Replace corresponding module. Refer to [Disassembly & Assembly](#).

DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detection condition	
P1B69	12	Cell voltage circuit (Module 10)	Diagnosis condition	Power switch ON
			Signal (terminal)	ASIC
			Threshold	When short circuit of cell voltage measuring circuit is detected.
			Diagnosis delay time	2 seconds or less

POSSIBLE CAUSE

- Cell voltage detection circuit
- Cell (module)
- Cell controller

FAIL-SAFE

Not applicable