

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.

1992 NISSAN Patrol LWB OEM Service and Repair Workshop Manual

Go to manual page

Refer to DTC Diagnosis Procedure.

NO-1>>

To check malfunction symptom before repair: Refer to <u>Intermittent Incident</u>.

NO-2>>

Confirmation after repair: INSPECTION END

DTC Diagnosis Procedure

1. CHECK 12V BATTERY

- 1. Power switch OFF and disconnect CONSULT from data link connector.
- 2. Get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors.

CAUTION:

Never operate the vehicle.

- 3. Check the 12V battery terminal connections.
- 4. Check the 12V battery.

Is the inspection result normal?

YES>>

<u>GO TO 2</u>.

NO>>

Repair or replace error-detected parts. GO TO 2.

2. PERFORM SELF-DIAGNOSIS (1)

(E) With CONSULT

- 1. Connect 12V battery cable to negative terminal.
- 2. Power switch OFF to ON without depressing the brake pedal.

CAUTION:

Never set the vehicle to READY.

- 3. Power switch OFF and disconnect CONSULT from data link connector.
- 4. Get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors.

CAUTION: Never operate the vehicle.

5. Power switch OFF to ON without depressing the brake pedal.



- 6. Erase self-diagnosis result for "BRAKE".
- 7. Power switch OFF and disconnect CONSULT from data link connector.
- 8. Get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors.

Never operate the vehicle.

9. Power switch OFF to ON without depressing the brake pedal.

CAUTION:

Never set the vehicle to READY.

10. Perform self-diagnosis for "BRAKE".

Is DTC "C18EC-11" detected?

YES>>

<u>GO TO 3</u>.

NO>>

INSPECTION END

3. CHECK CONNECTOR TERMINALS

- 1. Power switch OFF and disconnect CONSULT from data link connector.
- 2. Get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors.

CAUTION: Never operate the vehicle.

- 3. Disconnect 12V battery cable from negative terminal.
- 4. Disconnect electrically-driven intelligent brake unit harness connector, then check for malfunctions of terminals and connections.
- 5. Disconnect stroke sensor harness connector, then check for malfunctions of terminals and connections.

Is the inspection result normal?

YES>>

<u>GO TO 5</u>.

NO>>

Repair / replace harness, connector, or terminal. <u>GO TO 4</u>.

4. PERFORM SELF-DIAGNOSIS (2)

With CONSULT

- 1. Connect electrically-driven intelligent brake unit harness connector.
- 2. Connect stroke sensor harness connector.
- 3. Connect 12V battery cable to negative terminal.
- 4. Power switch OFF to ON without depressing the brake pedal.

CAUTION: Never set the vehicle to READY.

5. Power switch OFF and disconnect CONSULT from data link connector.

6. Get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors.

CAUTION:	
Never operate the vehicle.	

7. Power switch OFF to ON without depressing the brake pedal.

CAUTION: Never set the vehicle to READY.

- 8. Erase self-diagnosis result for "BRAKE".
- 9. Power switch OFF and disconnect CONSULT from data link connector.
- 10. Get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors.

CAUTION: Never operate the vehicle.

11. Power switch OFF to ON without depressing the brake pedal.

CAUTION: Never set the vehicle to READY.

12. Perform self-diagnosis for "BRAKE".

Is DTC "C18EC-11" detected?

YES>>

<u>GO TO 5</u>.

NO>>

INSPECTION END

5. CHECK ELECTRICALLY-DRIVEN INTELLIGENT BRAKE UNIT POWER SUPPLY AND GROUND CIRCUIT

- 1. Connect stroke sensor harness connector.
- 2. Power switch OFF and disconnect CONSULT from data link connector.
- 3. Get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors.

CAUTION: Never operate the vehicle.

- 4. Disconnect 12V battery cable from negative terminal.
- 5. Disconnect electrically-driven intelligent brake unit harness connector.
- 6. Check the electrically-driven intelligent brake unit power supply and ground circuit. Refer to Diagnosis Procedure.

Is the inspection result normal?

Repair / replace harness, connector, terminal, fuse, or fusible link. <u>GO TO 6</u>.

6. PERFORM SELF-DIAGNOSIS (3)

(B) With CONSULT

1. Power switch OFF to ON without depressing the brake pedal.

CAUTION: Never set the vehicle to READY.

- 2. Power switch OFF and disconnect CONSULT from data link connector.
- 3. Get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors.

CAUTION: Never operate the vehicle.

4. Power switch OFF to ON without depressing the brake pedal.

CAUTION: Never set the vehicle to READY.

- 5. Erase self-diagnosis result for "BRAKE".
- 6. Power switch OFF and disconnect CONSULT from data link connector.
- 7. Get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors.

CAUTION: Never operate the vehicle.

8. Power switch OFF to ON without depressing the brake pedal.

CAUTION: Never set the vehicle to READY.

9. Perform self-diagnosis for "BRAKE".

Is DTC "C18EC-11" detected?

YES>>

<u>GO TO 7</u>.

NO>>

INSPECTION END

7. CHECK BRAKE PEDAL HEIGHT

Check each brake pedal height. Refer to BRAKE PEDAL : Periodic Maintenance Operation.

Is the inspection result normal?

YES>>

GO TO 9.

NO>>

Adjust each height. Refer to <u>BRAKE PEDAL</u> : <u>Periodic Maintenance Operation</u>. <u>GO TO 8</u>.

8. PERFORM SELF-DIAGNOSIS (4)

With CONSULT

1. Power switch OFF to ON without depressing the brake pedal.

CAUTION: Never set the vehicle to READY.

- 2. Power switch OFF and disconnect CONSULT from data link connector.
- 3. Get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors.

CAUTION: Never operate the vehicle.

4. Power switch OFF to ON without depressing the brake pedal.

CAUTION: Never set the vehicle to READY.

- 5. Erase self-diagnosis result for "BRAKE".
- 6. Power switch OFF and disconnect CONSULT from data link connector.
- 7. Get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors.

CAUTION:

Never operate the vehicle.

8. Power switch OFF to ON without depressing the brake pedal.

CAUTION: Never set the vehicle to READY.

9. Perform self-diagnosis for "BRAKE".

Is DTC "C18EC-11" detected?

YES>>

<u>GO TO 9</u>.

NO>>

INSPECTION END

9. CHECK STROKE SENSOR CIRCUIT

1. Power switch OFF and disconnect CONSULT from data link connector.

2. Get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors.

CAUTION:
Never operate the vehicle.

- 3. Disconnect 12V battery cable from negative terminal.
- 4. Disconnect stroke sensor harness connector.
- 5. Disconnect electrically-driven intelligent brake unit harness connector.
- 6. Check the continuity between stroke sensor harness connector and electrically-driven intelligent brake unit.

Stroke sensor		Electrically-driven intelligent brake unit			
Connector	Terminal	Connector Terminal		- Continuity	
	3	B63*1 B64*2	3 23 3 2	23	Existed
	3			Not existed	
	3		22	Not existed	
	3		8	Not existed	
	2		23	Not existed	
	2		2	Existed	
	2		22	Not existed	
D20	2		8	Not existed	
539	1		23	Not existed	
	1		2	Not existed	
	1		22	Existed	
	1		8	Not existed	
	4		23	Not existed	
	4		2	Not existed	
	4		22	Not existed	
	4		8	Existed	

*1: Without ProPILOT Assist 2.0

*2: With ProPILOT Assist 2.0

Is the inspection result normal?

YES>>

<u>GO TO 10</u>.

NO>>

Repair / replace harness or connector. GO TO 12.

10. CHECK STROKE SENSOR POWER SUPPLY

- 1. Connect electrically-driven intelligent brake unit harness connector.
- 2. Connect 12V battery cable from negative terminal.
- 3. Get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors.

CAUTION: Never operate the vehicle.

4. Power switch OFF to ON without depressing the brake pedal.

CAUTION:

Never set the vehicle to READY.

5. Check the stroke sensor power voltage.

+			Voltage
Stroke sensor			
Connector	Terminal		
B39	2	Ground	4.8 - 5.15 V

Is the inspection result normal?

YES>>

<u>GO TO 11</u>.

NO>>

Repair / replace error-detected parts. GO TO 11.

11. CHECK STROKE SENSOR GROUND CIRCUIT

- 1. Power switch OFF and disconnect CONSULT from data link connector.
- 2. Get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors.

CAUTION: Never operate the vehicle.

- 3. Disconnect 12V battery cable from negative terminal.
- 4. Disconnect stroke sensor harness connector.
- 5. Disconnect electrically-driven intelligent brake unit harness connector.
- 6. Check the continuity between stroke sensor harness connector and ground.

roke sensor		Continuity	
Connector	Terminal		Continuity
B39	4	Ground	Not existed

Is the inspection result normal?

YES>>

<u>GO TO 12</u>.

NO>>

Repair / replace harness or connector. GO TO 12.

12. PERFORM SELF-DIAGNOSIS (4)

(E) With CONSULT

- 1. Connect electrically-driven intelligent brake unit harness connector.
- 2. Connect 12V battery cable from negative terminal.
- 3. Power switch OFF to ON without depressing the brake pedal.

CAUTION: Never set the vehicle to READY.

- 4. Power switch OFF and disconnect CONSULT from data link connector.
- 5. Get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors.

CAUTION: Never operate the vehicle.

6. Power switch OFF to ON without depressing the brake pedal.

CAUTION: Never set the vehicle to READY.

- 7. Erase self-diagnosis result for "BRAKE".
- 8. Power switch OFF and disconnect CONSULT from data link connector.
- 9. Get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors.

CAUTION: Never operate the vehicle.

10. Power switch OFF to ON without depressing the brake pedal.

CAUTION:

Never set the vehicle to READY.

11. Perform self-diagnosis for "BRAKE".

Is DTC "C18EC-11" detected?

YES>>

Replace the electrically-driven intelligent brake unit. Refer to <u>ELECTRICALLY-DRIVEN INTELLIGENT BRAKE UNIT : Removal</u> <u>& Installation</u>.

NO>>

INSPECTION END