

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.

1991 NISSAN Patrol SWB OEM Service and Repair Workshop Manual

[Go to manual page](#)

Replace the electrically-driven intelligent brake unit. Refer to [ELECTRICALLY-DRIVEN INTELLIGENT BRAKE UNIT : Removal & Installation](#).

NO>>

[GO TO 11.](#)

11. REPLACE WHEEL SENSOR (1)

 With CONSULT

1. Replace the rear right wheel sensor. Refer to [REAR WHEEL SENSOR : Removal & Installation](#).
2. Connect 12V battery 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 ON without depressing the brake pedal.

CAUTION:
Never set the vehicle to READY.

7. Set the vehicle to READY.
8. Erase self-diagnosis result for "BRAKE".
9. Select "BRAKE" and "Data monitor", check "Front LH wheel speed", "Front RH wheel speed", "Rear LH wheel speed", and "Rear RH wheel speed".



NOTE:
Set the "Data monitor" recording speed to "10 msec".

10. Read a value (wheel speed) of all wheel sensor.



NOTE:
Vehicle must be driven after repair or replacement to erase the previous DTCs.

Note the difference at 50 km/h (31 MPH) between the wheel speed detected by rear right wheel sensor and the maximum/minimum wheel speed detected by the other rear right wheel sensor, is the difference within 5%, respectively?

YES>>

[GO TO 12.](#)

NO>>

[GO TO 24.](#)

12. PERFORM SELF-DIAGNOSIS (3)

 With CONSULT

1. Stop the vehicle.
2. Power switch OFF.
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 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 ON without depressing the brake pedal.

CAUTION:
Never set the vehicle to READY.

11. Perform self-diagnosis for “BRAKE”.

Is DTC “B14E3-09” detected?

YES>>

[GO TO 24.](#)

NO>>

INSPECTION END

13. CHECK CONNECTOR

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 negative terminal.
4. Check the electrically-driven intelligent brake unit harness connector for disconnection or looseness.
5. Check the rear right wheel sensor harness connector for disconnection or looseness.

Is the inspection result normal?

YES>>

[GO TO 16.](#)

NO>>

Repair / replace harness or connector, securely lock the connector. [GO TO 14.](#)

14. CHECK DATA MONITOR (2)

 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 ON without depressing the brake pedal.

CAUTION:

Never set the vehicle to READY.

5. Set the vehicle to READY.
6. Erase self-diagnosis result for "BRAKE".
7. Select "BRAKE" and "Data monitor", check "Front LH wheel speed", "Front RH wheel speed", "Rear LH wheel speed", and "Rear RH wheel speed".

**NOTE:**

Set the "Data monitor" recording speed to "10 msec".

8. Read a value (wheel speed) of all wheel sensor.

**NOTE:**

Vehicle must be driven after repair or replacement to erase the previous DTCs.

Note the difference at 50 km/h (31 MPH) between the wheel speed detected by rear right wheel sensor and the maximum/minimum wheel speed detected by the other rear right wheel sensor, is the difference within 5%, respectively?


YES>>

[GO TO 15.](#)

NO>>

[GO TO 16.](#)

15. PERFORM SELF-DIAGNOSIS (4)

 With CONSULT

1. Stop the vehicle.
2. Power switch OFF.
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 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 ON without depressing the brake pedal.

CAUTION:
Never set the vehicle to **READY**.

11. Perform self-diagnosis for “BRAKE”.

Is DTC “B14E3-09” detected?

YES>>

[GO TO 16.](#)

NO>>

INSPECTION END

16. CHECK TERMINAL

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 negative terminal.
4. Disconnect electrically-driven intelligent brake unit harness connector.
5. Check the electrically-driven intelligent brake unit terminals for damage or loose connection with harness connector.
6. Disconnect rear right wheel sensor harness connector.
7. Check the rear right wheel sensor terminals for damage or loose connection with harness connector.

Is the inspection result normal?

YES>>

[GO TO 19.](#)

NO>>

Repair / replace harness, connector, or terminal. [GO TO 17.](#)

17. CHECK DATA MONITOR (3)

 With CONSULT

1. Connect electrically-driven intelligent brake unit harness connector.
2. Connect rear right wheel sensor harness connector.
3. Connect 12V battery 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 ON without depressing the brake pedal.

CAUTION:
Never set the vehicle to READY.

8. Set the vehicle to READY.
9. Erase self-diagnosis result for "BRAKE".

10. Select “BRAKE” and “Data monitor”, check “Front LH wheel speed”, “Front RH wheel speed”, “Rear LH wheel speed”, and “Rear RH wheel speed”.



NOTE:

Set the “Data monitor” recording speed to “10 msec”.

11. Read a value (wheel speed) of all wheel sensor.



NOTE:

Vehicle must be driven after repair or replacement to erase the previous DTCs.

Note the difference at 50 km/h (31 MPH) between the wheel speed detected by rear right wheel sensor and the maximum/minimum wheel speed detected by the other rear right wheel sensor, is the difference within 5%, respectively?

YES>>

[GO TO 18.](#)

NO>>

[GO TO 19.](#)

18. PERFORM SELF-DIAGNOSIS (5)

 With CONSULT

1. Stop the vehicle.
2. Power switch OFF.
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 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 ON without depressing the brake pedal.

CAUTION:

Never set the vehicle to READY.

11. Perform self-diagnosis for “BRAKE”.

Is DTC “B14E3-09” detected?

YES>>

[GO TO 19.](#)

NO>>

INSPECTION END

19. CHECK WHEEL SENSOR HARNESS

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 negative terminal.

4. Disconnect electrically-driven intelligent brake unit harness connector.

5. Disconnect rear right wheel sensor harness connector.

6. Check the continuity between electrically-driven intelligent brake unit harness connector and rear right wheel sensor harness connector.

Electrically-driven intelligent brake unit		—	Continuity
Connector	Terminal		
B64	7, 15	Ground	Not existed

Is the inspection result normal?

YES>>

[GO TO 20.](#)

NO>>

Repair / replace harness or connector. [GO TO 20.](#)

20. CHECK DATA MONITOR (4)

 With CONSULT

1. Connect ABS actuator and electric unit (control unit) harness connector.

2. Connect rear right wheel sensor harness connector.

3. Connect 12V battery 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 ON without depressing the brake pedal.

CAUTION:

Never set the vehicle to READY.

8. Set the vehicle to READY.
9. Erase self-diagnosis result for "BRAKE".
10. Select "BRAKE" and "Data monitor", check "Front LH wheel speed", "Front RH wheel speed", "Rear LH wheel speed", and "Rear RH wheel speed".

**NOTE:**

Set the "Data monitor" recording speed to "10 msec".

11. Read a value (wheel speed) of all wheel sensor.

**NOTE:**

Vehicle must be driven after repair or replacement to erase the previous DTCs.

Note the difference at 50 km/h (31 MPH) between the wheel speed detected by rear right wheel sensor and the maximum/minimum wheel speed detected by the other rear right wheel sensor, is the difference within 5%, respectively?

YES>>

[GO TO 21.](#)

NO>>

[GO TO 22.](#)

21. PERFORM SELF-DIAGNOSIS (6)

 With CONSULT

1. Stop the vehicle.
2. Power switch OFF.
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 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 ON without depressing the brake pedal.

CAUTION:

Never set the vehicle to READY.

11. Perform self-diagnosis for "BRAKE".

Is DTC "B14E3-09" detected?

YES>>

[GO TO 22.](#)

NO>>

INSPECTION END

22. REPLACE WHEEL SENSOR (2)

 With CONSULT

1. Replace the rear right wheel sensor. Refer to [REAR WHEEL SENSOR : Removal & Installation](#).
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 ON without depressing the brake pedal.

CAUTION:

Never set the vehicle to READY.