

Your Ultimate Source for OEM Repair Manuals

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1998 NISSAN Patrol SWB OEM Service and Repair Workshop Manual

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**NOTE:**

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

9. 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 front left wheel sensor and the maximum/minimum wheel speed detected by the other front left wheel sensor, is the difference within 5%, respectively?

YES>>

[GO TO 19.](#)

NO>>

[GO TO 20.](#)

19. PERFORM SELF-DIAGNOSIS (5)

 With CONSULT

1. Stop the vehicle.
2. Power switch OFF (Auto ACC function ON).
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. Perform self-diagnosis for “ABS”.

Is DTC “C1061-92” detected?

YES>>

[GO TO 20.](#)

NO>>

INSPECTION END

20. REPLACE WHEEL SENSOR (2)

 With CONSULT

1. Replace the front left wheel sensor. Refer to [FRONT WHEEL SENSOR : Removal & Installation](#).
2. Erase self-diagnosis result for “ABS”.
3. Power switch OFF (Auto ACC function ON).

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. Set the vehicle to READY.

6. Select “ABS” and “Data monitor”, check “Front left wheel speed”, “Front right wheel speed“, “Rear left wheel speed“, and “Rear right wheel speed“.



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

7. 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 front left wheel sensor and the maximum/minimum wheel speed detected by the other front left 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 (Auto ACC function ON).
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. Perform self-diagnosis for “ABS”.

Is DTC “C1061-92” detected?

YES>>

[GO TO 22.](#)

NO>>

22. REPLACE SENSOR ROTOR

 With CONSULT

1. Replace the front left sensor rotor. Refer to [FRONT SENSOR ROTOR : Removal & Installation](#).
2. Erase self-diagnosis result for “ABS”.
3. Power switch OFF (Auto ACC function ON).
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. Set the vehicle to READY.
6. Drive the vehicle at approximately 50 km/h (31 MPH) or more for approximately 2 minutes.



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

7. Stop the vehicle.
8. Power switch OFF (Auto ACC function ON).
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 “ABS”.

Is DTC “C1061-92” detected?

YES>>

Replace the ABS actuator and electric unit (control unit). Refer to [ABS ACTUATOR AND ELECTRIC UNIT \(CONTROL UNIT\) : Removal & Installation](#).

NO>>

INSPECTION END

DTC DETECTION LOGIC

DTC No.		CONSULT screen terms	DTC detection condition	
C1063	02	Front right wheel sensor	Diagnosis condition	<ul style="list-style-type: none"> • Power switch is ON. • When front right wheel sensor power supply voltage is normal.
			Signal (terminal)	<ul style="list-style-type: none"> • Front right wheel sensor signal • Front right wheel sensor power supply
			Threshold	When a malfunction is detected in front right wheel sensor.
			Diagnosis delay time	1 second or less

POSSIBLE CAUSE



NOTE:

Confirm if DTC is PAST or CRNT. If DTC is CRNT, proceed with Diagnosis Procedure. If DTC is PAST, clear DTC. Do not replace the ABS actuator and electric unit (control unit) for a PAST DTC.

PAST DTC	CRNT DTC
<ul style="list-style-type: none"> • Harness or connector • ABS actuator and electric unit (control unit) power supply system • Fuse • Fusible link • 12V battery 	<ul style="list-style-type: none"> • Vehicle was not driven after previous repair • Harness or connector • Front right wheel sensor • ABS actuator and electric unit (control unit) • ABS actuator and electric unit (control unit) power supply system • Fuse • Fusible link • 12V battery

FAIL-SAFE

The following functions are suspended.

- VDC function
- TCS function
- ABS function
- EBD function
- hill start assist function

- Brake limited slip differential (BLSD) function
- Brake assist function
- Brake force distribution function
- Cooperative regenerative brake function
- Electric parking brake function

Sample

1. PRECONDITIONING

If “Confirmation Procedure” has been previously conducted, always power switch OFF, 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 before conducting the next test.

>>

[GO TO 2](#)

2. CHECK DTC DETECTION

 With CONSULT

1. Power switch OFF (Auto ACC is ON).
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. Power switch ON without depressing the brake pedal.

CAUTION:
Never set the vehicle to READY.

4. Perform self-diagnosis for “ABS”.

Is DTC “C1063-02” detected?

YES-1>>

“CRNT” is displayed: Refer to [DTC Diagnosis Procedure](#).

YES-2>>

“PAST” is displayed: INSPECTION END (Erase the memory of self-diagnosis results.)

NO-1>>

To check malfunction symptom before repair: Refer to [Intermittent Incident](#).

NO-2>>

Confirmation after repair: INSPECTION END

CAUTION:

Never check between wheel sensor harness connector terminals.

1. CHECK WHEEL SENSOR

1. Disconnect 12V battery negative terminal.
2. Check the front right wheel sensor for damage.

Is the inspection result normal?

YES>>

[GO TO 3.](#)

NO>>

[GO TO 2.](#)

2. REPLACE WHEEL SENSOR (1)

 With CONSULT

1. Replace the front right wheel sensor. Refer to [FRONT WHEEL SENSOR : Removal & Installation.](#)
2. Erase self-diagnosis result for “ABS”.
3. Power switch OFF (Auto ACC function ON).
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. Set the vehicle to READY.
6. Drive the vehicle at approximately 50 km/h (31 MPH) or more for approximately 2 minutes.

**NOTE:**

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

7. Stop the vehicle.
8. Power switch OFF (Auto ACC function ON).
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 "ABS".

Is DTC "C1063-02" detected?

YES>>

[GO TO 3.](#)

NO>>

INSPECTION END

3. CHECK CONNECTOR

1. Disconnect 12V battery negative terminal.
2. Check the ABS actuator and electric unit (control unit) harness connector for disconnection or looseness.
3. Check the front right wheel sensor harness connector for disconnection or looseness.

Is the inspection result normal?

YES>>

[GO TO 5.](#)

NO>>

Repair / replace harness or connector, securely lock the connector. [GO TO 4.](#)

4. PERFORM SELF-DIAGNOSIS (1)

 With CONSULT

1. Connect 12V battery negative terminal.
2. Erase self-diagnosis result for "ABS".
3. Power switch OFF (Auto ACC function ON).
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. Set the vehicle to READY.
6. Drive the vehicle at approximately 50 km/h (31 MPH) or more for approximately 2 minutes.



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

7. Stop the vehicle.
8. Power switch OFF (Auto ACC function ON).
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 “ABS”.

Is DTC “C1063-02” detected?

YES>>

[GO TO 5.](#)

NO>>

INSPECTION END

5. CHECK ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) POWER SUPPLY AND GROUND CIRCUIT

Check the ABS actuator and electric unit (control unit) power supply and ground circuit. Refer to [Diagnosis Procedure](#).

Is the inspection result normal?

YES>>

[GO TO 7.](#)

NO>>

Repair / replace harness, connector, terminal, fuse, or fusible link. [GO TO 6.](#)

6. PERFORM SELF-DIAGNOSIS (2)

 With CONSULT

1. Connect ABS actuator and electric unit (control unit) harness connector.
2. Connect front right wheel sensor harness connector.
3. Connect 12V battery negative terminal.
4. Erase self-diagnosis result for “ABS”.
5. Power switch OFF (Auto ACC function ON).
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. Set the vehicle to READY.

8. Drive the vehicle at approximately 50 km/h (31 MPH) or more for approximately 2 minutes.



NOTE:

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

9. Stop the vehicle.

10. Power switch OFF (Auto ACC function ON).