

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.

1996 NISSAN Micra 3 Doors OEM Service and Repair Workshop Manual

Go to manual page

Is DTC detected?

YES>>

Check the DTC. Refer to <u>DTC Index</u>.

NO>>

Replace the ABS actuator and electric unit (control unit). Refer to <u>ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)</u>: <u>Removal & Installation</u>.

Symptom	Result
Brake pedal slightly vibrates and operation sound (motor sound and sound from suspension) occurs when VDC function, TCS function, ABS function, EBD function, hill start assist function, brake limited slip differential (BLSD) function, assist function, and brake brake force distribution function operates.	This is not a malfunction, because it is caused by VDC function, TCS function, ABS function, EBD function, hill start assist function, brake limited slip differential (BLSD) function, brake assist function, and brake force distribution function that are normally operated.
Brake stopping distance may become longer than models without ABS function depending on the road conditions, when ABS function is operated on slippery road like rough road, gravel road or snowy road.	
Brake pedal vibrates and operation sound occurs during sudden acceleration and cornering, when VDC function, TCS function, brake limited slip differential (BLSD) function or brake assist function, and brake force distribution function operated.	
Brake pedal vibrates and motor sound from the engine room occurs, when the vehicle to READY starts or the vehicle starts just after Set the vehicle to READY.	This is not a malfunction, because it is caused by operation check of ABS actuator and electric unit (control unit).
Acceleration may be felt insufficient depending on the road conditions.	This is not a malfunction, because it is caused by TCS function that puts the highest priority to obtain the optimum traction (stability).
TCS function may operate momentarily, while driving on a road where friction coefficient varies, or when downshifting, or fully depressing accelerator pedal.	
ABS warning lamp and VDC warning lamp may turn ON, when the vehicle is on a rotating turntable or is given a strong shaking or large vibrations on a ship while the vehicle is READY.	
VDC warning lamp may turn ON and VDC function, TCS function, brake limited slip differential (BLSD) function, brake assist function and hill start assist function may not normally operate, when driving on a special road the is extremely slanted (bank in a circuit course).	In this case, set the vehicle to READY again on a normal road. If the normal condition is restored, there is no malfunction. In that case, erase "ABS" self-diagnosis result memory with CONSULT.
A malfunction in yaw rate/side/decel G sensor system may be detected when the vehicle sharply turns during a spin turn, acceleration turn or drift driving while VDC function and TCS function are OFF (information display of combination meter is pressed and VDC OFF indicator lamp is in ON status).	
The vehicle speed does not increase, when the accelerator pedal is depressed while the vehicle is on a 2-wheel chassis dynamometer for speedometer check.	This is normal. (When checking the vehicle on a chassis dynamometer, operate VDC OFF so that TCS function is OFF.)
Flow sound of brake fluid from engine room occurs when hill start assist function operates.	This is not a malfunction, because it is caused by hill start assist function that is normally operated.

Brake stopping distance is long when ABS function is operated.

CAUTION:

Brake stopping distance on slippery road like rough road, gravel road or snowy road may become longer when ABS is operated than when ABS is not operated.

1. CHECK BRAKING FORCE

Check the brake force using a brake tester.

Is the inspection result normal?

YES>>

<u>GO TO 2</u>.

NO>>

Check each components of brake system.

2. CHECK BRAKE PERFORMANCE

Disconnect the ABS actuator and electric unit (control unit) connector so that ABS does not operate. Check the brake stopping distance in this condition. Connect harness connectors after checking.

Is the inspection result normal?

YES>>

Normal

NO>>

Check each components of brake system.

VDC function, TCS function, ABS function, EBD function, hill start assist function, brake limited slip differential (BLSD) function, brake assist function, and brake force distribution function operates in excessive operation frequency.

1. CHECK BRAKING FORCE

Check brake force using a brake tester.

Is the inspection result normal?

YES>>

<u>GO TO 2</u>.

NO>>

Check the brake system.

2. CHECK FRONT AXLE AND REAR AXLE

Check that there is no excessive looseness in front and rear axle.

- Front axle: Refer to FRONT WHEEL HUB AND KNUCKLE : Periodic Maintenance Operation.
- Rear axle: Refer to <u>REAR WHEEL HUB</u> : Periodic Maintenance Operation.

Is the inspection result normal?

YES>>

<u>GO TO 3</u>.

NO>>

Repair or replace error-detected parts.

3. CHECK WHEEL SENSOR

Check the wheel sensor.

- Check installation and damage of wheel sensor.
- Check connection of wheel sensor harness connector.
- Check terminal of wheel sensor harness connector.

Is the inspection result normal?

YES>>

<u>GO TO 4</u>.

NO>>

Repair or replace the wheel sensor.

- Front wheel sensor: Refer to FRONT WHEEL SENSOR : Removal & Installation.
- Rear wheel sensor: Refer to <u>REAR WHEEL SENSOR : Removal & Installation</u>.

4. CHECK SENSOR ROTOR

Check that there is no looseness, damage or foreign material on sensor rotor.

Is the inspection result normal?

YES>>

<u>GO TO 5</u>.

NO>>

Repair or replace the sensor rotor.

- Front sensor rotor: Refer to FRONT SENSOR ROTOR : Removal & Installation.
- Rear sensor rotor: Refer to <u>REAR SENSOR ROTOR : Removal & Installation</u>.

5. CHECK WARNING LAMP TURN OFF

Check that ABS warning lamp, brake warning lamp, and VDC warning lamp turn OFF several seconds after power switch is ON.

CAUTION:

Brake warning lamp turns ON when brake fluid is less than the specified level (brake fluid level switch is ON).

Is the inspection result normal?

YES>>

Normal

NO>>

Perform self-diagnosis for "ABS" with CONSULT.

A malfunction of brake pedal feel (height or others) is detected when brake pedal is depressed.

SIEMD-7262673

1. CHECK FRONT AND REAR AXLE

Check that there is no excessive looseness in front and rear axle.

- Front axle: Refer to FRONT WHEEL HUB AND KNUCKLE : Periodic Maintenance Operation.
- Rear axle: Refer to <u>REAR WHEEL HUB : Periodic Maintenance Operation</u>.

Is the inspection result normal?

YES>>

<u>GO TO 2</u>.

NO>>

Repair or replace error-detected parts.

2. CHECK DISC ROTOR

Check disc rotor runout.

- Front: Refer to FRONT DISC ROTOR : Periodic Maintenance Operation.
- Rear: Refer to <u>REAR DISC ROTOR : Periodic Maintenance Operation</u>.

Is the inspection result normal?

YES>>

<u>GO TO 3</u>.

NO>>

Replace the disc rotor.

- Front: Refer to FRONT WHEEL HUB AND KNUCKLE : Removal & Installation.
- Rear: Refer to <u>REAR WHEEL HUB : Removal & Installation</u>.

3. CHECK BRAKE FLUID LEAKAGE

Check fluid leakage.

- Front: Refer to FRONT BRAKE PIPING : Inspection.
- Rear: Refer to <u>REAR BRAKE PIPING</u> : Inspection.

Is the inspection result normal?

YES>>

<u>GO TO 4</u>.

NO>>

Repair or replace error-detected parts.

4. CHECK BRAKE PEDAL

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

Is the inspection result normal?

YES>>

<u>GO TO 5</u>.

NO>>

Adjust each item of brake pedal. Refer to <u>BRAKE PEDAL : Periodic Maintenance Operation</u>.

5. CHECK BRAKING FORCE

Check brake force using a brake tester.

Is the inspection result normal?

YES>>

<u>GO TO 6</u>.

NO>>

Check each components of brake system.

6. CHECK BRAKE PERFORMANCE

Disconnect ABS actuator and electric unit (control unit) connector so that ABS does not operate. Check that brake force is normal in this condition. Connect harness connectors after checking.

Is the inspection result normal?

YES>>

Normal

NO>>

Check each components of brake system.

- Brake pedal vibrates and motor sound from ABS actuator and electric unit (control unit) occurs, when the set the vehicle to READY.
- Motor noise from ABS actuator and electric unit (control unit) occurs in the following conditions.
 - When deceleration-stop-brake holding while the pro-pilot is operating
 - When automatic brake hold control is start and release
 - When changing from automatic brake hold to parking brake
- Brake pedal vibrates during braking.

CAUTION:

Vibration may be felt during brake pedal is lightly depressed (just placing a foot on it) in the following conditions. This is normal.

- When driving on slippery road
- During cornering at high speed
- When passing over bumps or grooves [approximately 50 mm (1.97 in) or more]
- When pulling away just after vehicle ready [at approximately 10 km/h (6.2 MPH) or more]

1. SYMPTOM CHECK 1

Check that there are pedal vibrations when the power on.

Do vibrations occur?

YES>>

<u>GO TO 2</u>.

NO>>

Check the brake pedal. Refer to BRAKE PEDAL : Inspection and Adjustment.

2. SYMPTOM CHECK 2

Check that motor sound from ABS actuator and electric unit (control unit) occurs when the power on.

Does the operation sound occur?

YES>>

<u>GO TO 3</u>.

NO>>

Perform self-diagnosis for "ABS" with CONSULT.

3. SYMPTOM CHECK 3

Check symptoms when electrical component (headlamps, etc.) switches are operated.

Does the symptom occur?

YES>>

Check that radio (including wiring), antenna and antenna lead-in wires are not located near ABS actuator and electric unit (control unit). Move them if they are located near ABS actuator and electric unit (control unit).

NO>>

Normal