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August 31 2005

Mr. George Person Chief, Recall Analysis Division Office of Defects Investigation Safety Assurance National Highway Traffic Safety Administration 400 Seventh Street, S.W. Washington, D.C. 20590

Ref: 05V-269

Dear Mr. Person:

The enclosed communication is being provided pursuant to 49 CFR Part 573.6(c)(9).

Technical Compliance Department

Encl.

Technical Bulletin



RECALL CAMPAIGN BULLETIN

Reference: Date:

NTB05-060 August 12, 2005

VOLUNTARY RECALL CAMPAIGN SENTRA FUEL TANK VAPOR HOSE

CAMPAIGN I.D. # / NHTSA #: PM501 / 05V-269

APPLIED VEHICLE: 2005 Sentra (B15)

APPLIED VINS: Vehicles built between: 3N1*B51**5L487119 - 541526

NOTE: Use Service Comm to confirm campaign eligibility.

INTRODUCTION

Nissan has determined that some 2005 model year Nissan Sentra vehicles may have a defect which relates to motor vehicle safety. There is a possibility that a vapor hose located inside the fuel tank may not have been formed correctly in the manufacturing process. When the vehicle is parked with a full fuel tank, fuel may flow into the vapor hose, which is connected to a vapor canister. If the vehicle is parked for a long enough time, the vapor canister could become full, and excess fuel could spill out onto the ground. This could result in a fire if an ignition source is present. To prevent this condition from occurring, Nissan is conducting a Voluntary Safety Recall Campaign to check the vapor hose connections in the fuel tank to determine if a poor seal exists. If a poor seal is identified, a new fuel tank will be installed.

IDENTIFICATION NUMBER

Nissan has assigned identification number PM501 to this campaign. This number must appear on all communications and documentation of any nature dealing with this Campaign.

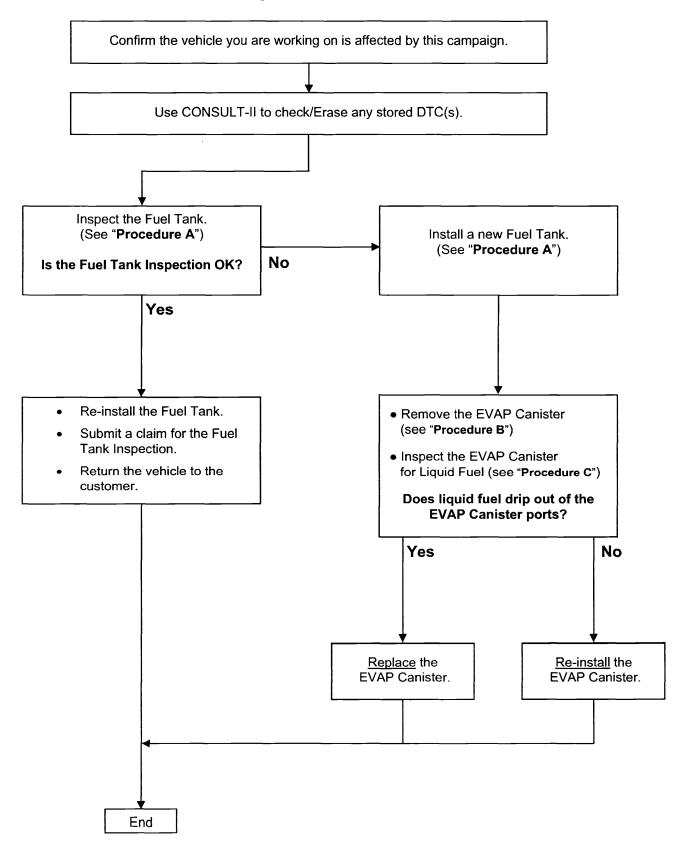
NUMBER OF VEHICLES POTENTIALLY AFFECTED

The number of vehicles potentially affected is approximately 43,900.

DEALER RESPONSIBILITY

It is the retailer's responsibility to check Service Comm for the campaign status on each vehicle falling within the range of this voluntary safety recall which for any reason enters the service department. This includes vehicles purchased from private parties or presented by transient (tourist) owners and vehicles in a dealer's inventory. Federal law requires that new vehicles in dealer inventory which are the subject of a safety recall must be corrected prior to delivery under a sale or lease. Failure to do so can result in civil penalties by the National Highway Traffic Safety Administration. While federal law applies only to new vehicles, Nissan strongly encourages dealers to correct any used vehicles in their inventory before they are retailed.

Repair Flow Chart



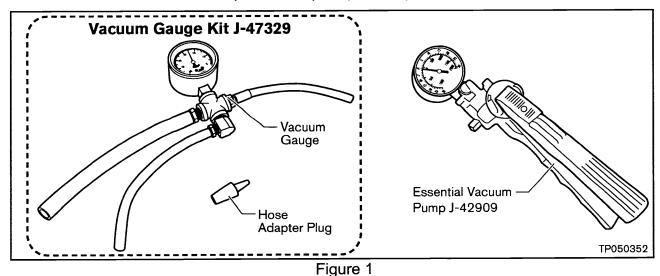
PROCEDURE A (Fuel Tank Removal, Inspection, and Installation)

WARNING:

- Make sure the Fuel Tank Level is 1/8 or less. If needed, use a suitable device to pump fuel out of the Fuel Tank (see Step 7 on page 7).
- Before performing any of the Service Procedures below, be certain there are no ignition sources (i.e., open flames, sparks, etc.) in or around the vehicle/work area.
- Make sure the appropriate rated fire extinguisher is available for immediate use.
- Use suitable protective gloves, safety glasses, or face shield.

To perform this procedure, you'll need:

- Essential Vacuum Gauge Kit J-47329 (sent to each dealer)
- Essential Vacuum Pump J-42909 (or equivalent)



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Preliminary Steps

- 1. Release the fuel pressure as follows:
 - a. Connect CONSULT-II to the vehicle.
 - b. Turn the Ignition Switch to the "ON" position.
 - c. Perform "FUEL PRESSURE RELEASE" in the "WORK SUPPORT" mode.
 - d. Start the engine.
 - e. After the engine stalls, crank it two or three times to release all fuel pressure.
 - f. Turn the Ignition Switch "OFF".
- 2. Turn the Ignition Switch "ON" and write down all radio station presets.
- 3. Write down the reading on the Fuel Gauge (½ full, ¼ full, etc.).
- 4. Turn the Ignition Switch "OFF" and disconnect the negative battery cable.
- 5. Remove the Fuel Filler Cap to release any pressure in the Fuel Tank.

Parts Removal

- 1. Remove the Rear Lower Seat Cushion.
 - Pull UP at two locations to release the Metal Ring from the Plastic Retainer (see Figure 2).

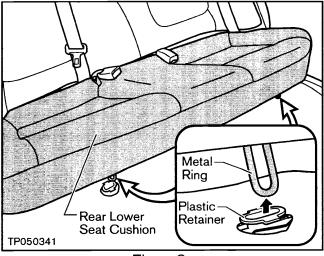


Figure2

- 2. Remove the Inspection Hole Cover as follows:
 - a. Turn each Attachment Clip 90° (see Figure 3a).
 - b. Then, lift the Cover UP and reach under and disconnect the Fuel Level Sensor/Pump Assembly Connector (see Figure 3b).

CAUTION: Be careful of the sharp edges around the Inspection Hole (see Figure 3b).

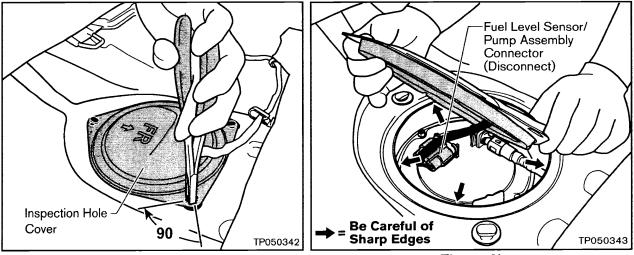


Figure 3a Figure 3b

- 3. Disconnect the Fuel Feed Hose Quick Connector from the Fuel Level Sensor/Pump Assembly.
 - <u>First</u>, press IN on the two side Lock Tabs (see Figure 4).
 - Then, pull BACK on the Quick Connector (see Figure 4).

CAUTION:

- The Quick Connector can be removed when the two side Lock Tabs are completely depressed.
- Do NOT twist the Fuel Feed Hose more than necessary.
- Do NOT use any tools to remove the Quick Connector.

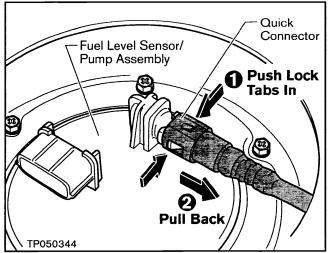
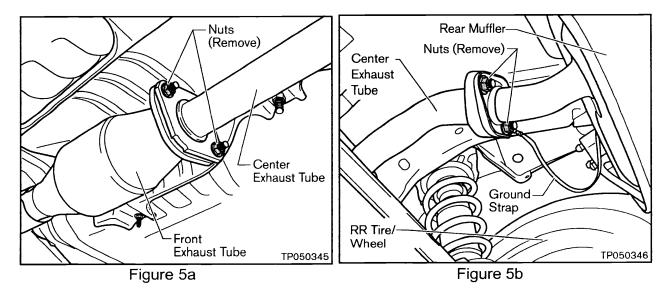


Figure 4

- 4. Raise the vehicle on a hoist.
- 5. Remove the Center Exhaust Tube as follows:

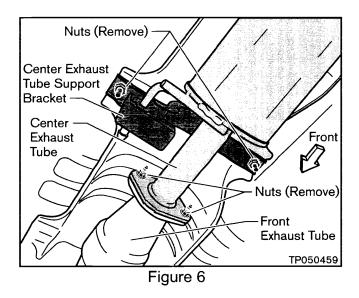
For Vehicles With QG18DE Engine

- a. Remove two Nuts that secure the Center Exhaust Tube to the Front Exhaust Tube (see Figure 5a).
- b. Remove two Nuts that secure the Center Exhaust Tube to the rear Muffler (see Figure 5b).

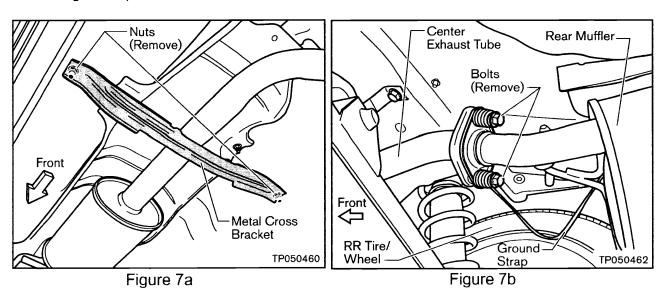


For Vehicles With QR25DE Engine

- a. Remove two Nuts that secure the Center Exhaust Tube to the Front Exhaust Tube (see Figure 6).
- Remove two Nuts and remove the Center Exhaust Tube Support Bracket (see Figure 6).



- c. Remove two Nuts and remove the Metal Cross Bracket (see Figure 7a).
- d. Remove two Bolts that secure the Center Exhaust Tube to the rear Muffler (see Figure 7b).



- 6. Disconnect the following Fuel Tank Hoses <u>from the vehicle</u> (leave them connected to the Tank). See Figure 8.
 - EVAP Hoses (qty 2)
 - Fuel Filler Hose (qty 1)
 - Vent Hose (qty 1)

NOTE: Mark the hoses with a permanent marker/duct tape for proper re-installation.

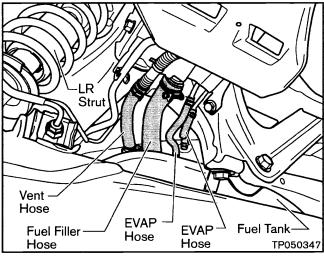


Figure 8

- 7. If the Fuel Tank level is over 1/8 full, use a suitable fuel removal device to pump fuel out of the Fuel Tank Filler Hose (see Figure 9).
 - Pump fuel out until the Fuel Tank level is 1/8 full or less.

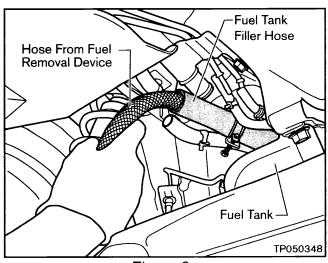
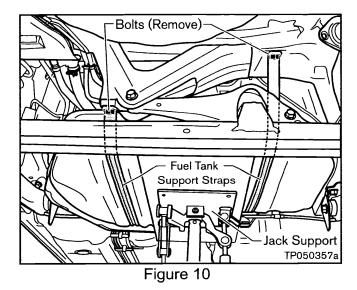


Figure 9

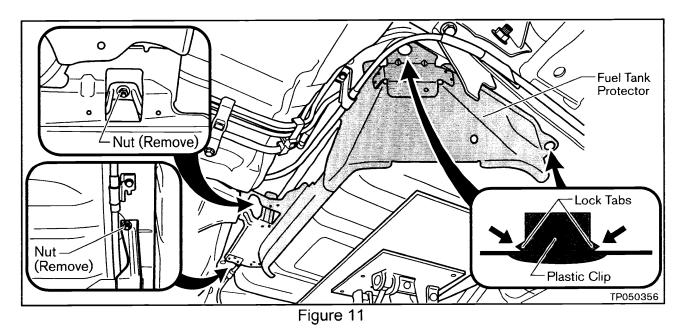
8. Place a suitable Jack under the Fuel Tank and then remove the two Bolts that secure the Fuel Tank Support Straps (see Figure 10).



9. Lower the Fuel Tank 3 inches and remove the Fuel Tank Protector as follows:

For Vehicles With QG18DE Engine

- a. Remove two Nuts and two Plastic Clips that hold the Fuel Tank Protector (see Figure 11).
 - To remove the Plastic Clips, press IN on the Lock Tabs (see Figure 11).
- b. Remove the Protector.



For Vehicles With QR25DE Engine

- a. Remove <u>four</u> Nuts and two Plastic Clips that hold the Fuel Tank Protector (see Figure 12).
 - To remove the Plastic Clips, press IN on the Lock Tabs (see Figure 12).
- b. Remove the Protector.

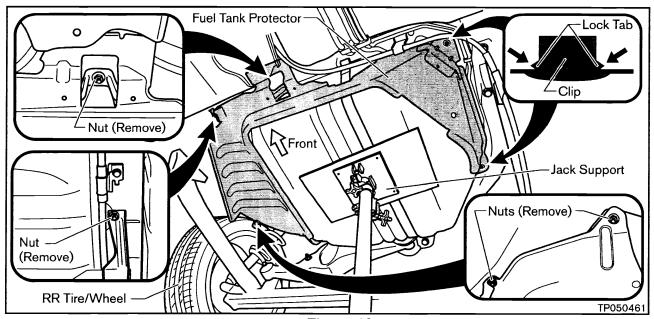


Figure 12

- 10. Remove the Fuel Tank from the vehicle and drain any remaining fuel into a suitable container. Then, place the tank on a sturdy, clean work surface.
- 11. Mark the <u>outer</u> EVAP Hose and <u>outer</u> Vent Hose with a permanent marker for proper re-installation, then remove these hoses from the Fuel Tank (see Figure 13).

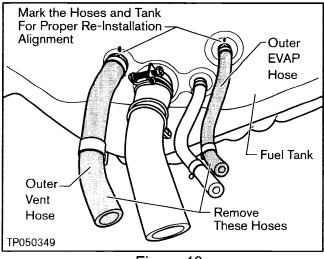


Figure 13

Fuel Tank Test

- 12. Turn the Fuel Tank upside down (bottom side up) and then "prop up" the filler-outlet side of the Tank with a piece of "2x4" wood as shown in Figure 14.
 - The Tank must be at a 20° angle (approximately) to perform the Fuel Tank test. Using the "2X4" wood will give you an approximate 20° angle.
 - Make sure any residual fuel (inside the tank) runs off to the lowest side of the tank and does not contact any of the internal tank components.

CAUTION: Do NOT damage the Fuel Level Sensor/Pump Assembly.

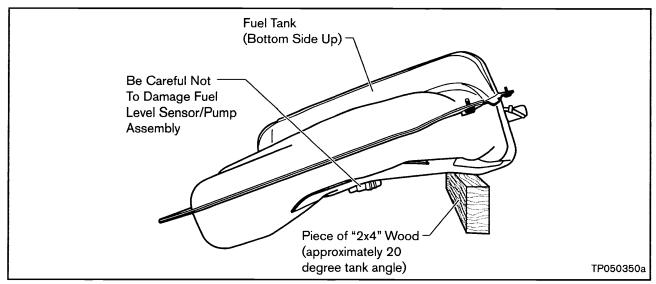


Figure 14

13. Get the Vacuum Gauge and Hose Adapter Plug from the Vacuum Gauge Kit J-47329 (see Figure 15).

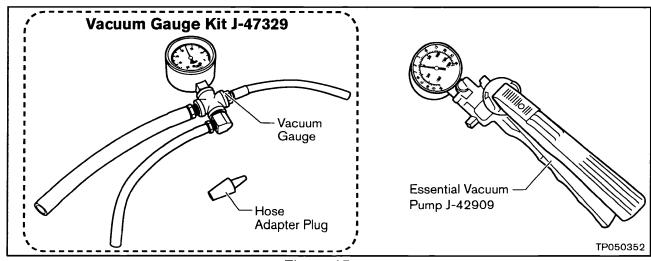


Figure 15

14. Confirm the Vacuum Gauge <u>does</u> NOT have any leaks as follows:

- a. Connect the large and small Tube (from the LH side of the gauge) to the Hose Adapter Plug (see Figure 16).
- b. Connect the remaining small Tube to a "known good" Vacuum Pump (see Figure 16).
- c. Apply vacuum and make sure there are no leaks (gauge does NOT lose vacuum).

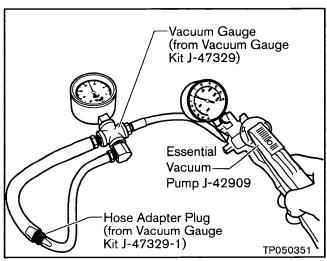
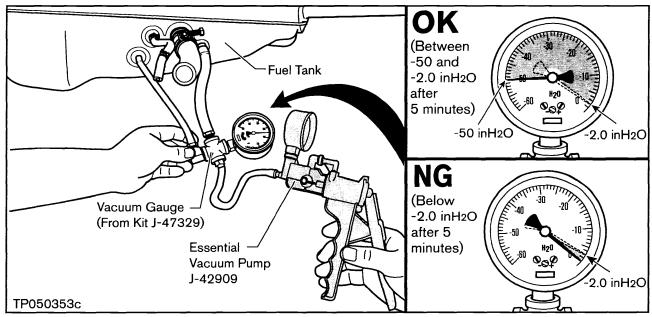


Figure 16

IMPORTANT: When applying vacuum:

- Squeeze the Vacuum Pump handle <u>slowly</u> as the Vacuum Gauge is <u>very</u> sensitive.
- Do NOT exceed the limits of the Vacuum Gauge.

- 15. Connect the Vacuum Gauge to the Fuel Tank as shown in Figure 17. Then apply **50** in**H₂O** of vacuum to the Fuel Tank and monitor the vacuum for **5** minutes.
 - The remaining open hoses on the tank do NOT need to be plugged to perform this
 procedure.
 - During the 5-minute vacuum test, occasionally tap on the bottom, center area of the Fuel Tank.



- Figure 17
- a. If, after 5 minutes, the vacuum is anywhere between 50 and 2.0 inH₂O:
 - ▶ The Fuel Tank is OK.
 - ► Go to "Fuel Tank Installation" (next page).
- b. If, after 5 minutes, the vacuum is below 2.0 in H_2O :
 - ▶ The Fuel Tank is NG.
 - ▶ Install a new Fuel Tank (see Parts Information for tank P/N).
 - ► Go to "Fuel Tank Installation" (next page).

Fuel Tank Installation

- 1. Install the Fuel Tank in the reverse order of removal, making sure:
 - All Fuel Tank Hoses are properly installed and securely tightened.
 - The Fuel Level Sensor/Pump Assembly Connector is securely reconnected.
 - The Fuel Feed Hose Quick Connector is securely snapped in place (the connector will "click" when it's locked into position). Pull on the Quick Connector to make sure it's fully locked into position.
- 2. Check the Fuel Feed Hose Quick Connector for leaks as follows:
 - a. First, apply fuel pressure to the fuel system by turning the Ignition Switch to the "**ON**" position (without starting the engine).
 - b. Then, check for fuel leaks at the Quick Connector.
 - c. Finally, start the engine and increase the idle speed. Then confirm there are no fuel leaks at the Quick Connector.

PROCEDURE B (EVAP Canister Removal and Installation)

WARNING:

- Before performing any of the Service Procedures below, be certain there are no ignition sources (i.e., open flames, sparks, etc.) in or around the vehicle/work area.
- Make sure the appropriate rated fire extinguisher is available for immediate use.
- Use suitable protective gloves, safety glasses, or face shield.

Parts Removal

1. Remove two Plastic Clips and one Bolt and remove the EVAP Canister Protector (see Figure 18).

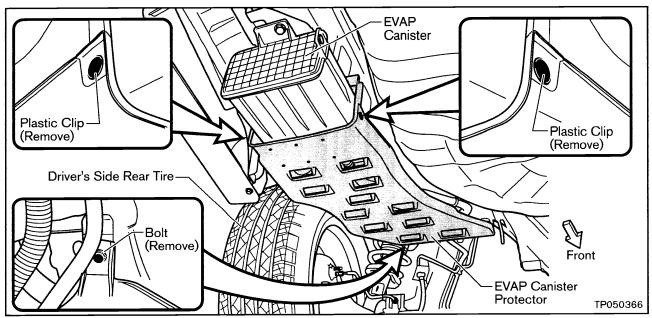


Figure 18

- 2. Disconnect the following from the EVAP Canister (refer to Figure 19):
 - EVAP Vent Control Valve Hose (disconnect from vehicle metal pipe)
 - EVAP Purge Hose
 - EVAP/ORVR Hose (press IN on both Tabs to release)
 - EVAP Vent Control Valve Connector
 - EVAP Pressure Sensor Connector

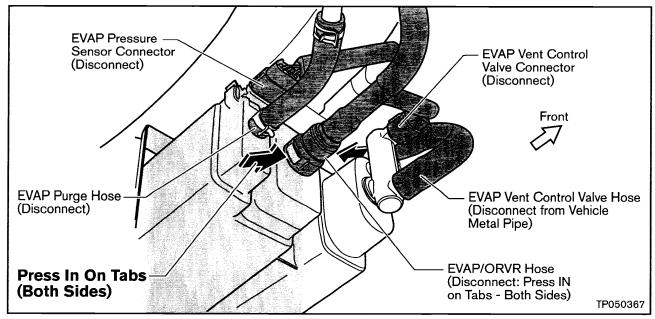


Figure 19

Remove one Bolt and slide the EVAP Canister rearward to remove it from the vehicle (see Figure 20).

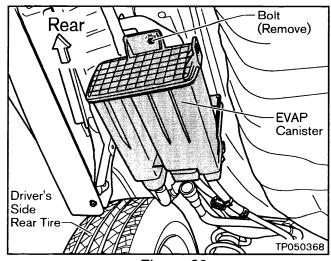


Figure 20

EVAP Canister Installation

- 4. Install the EVAP Canister in the reverse order of removal, making sure:
 - All hoses are properly re-connected and securely attached.
 - The wire harness connectors are securely re-connected / snapped in place.

PROCEDURE C (EVAP Canister Inspection)

- 1. Hold the EVAP Canister with the open Ports facing <u>downward</u> (see Figure 21).
 - Check for liquid fuel coming out of the open Ports.
 - If liquid fuel drips out of any of the open Ports, <u>replace</u> the EVAP Canister.
 - If NO liquid fuel drips out of the open Ports, <u>re-install</u> the EVAP Canister.

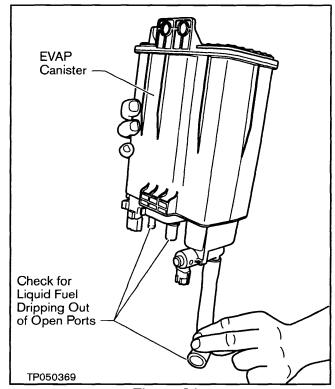
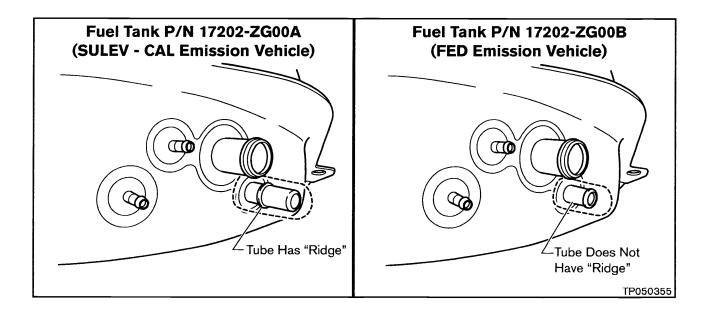


Figure 21

PARTS INFORMATION

DESCRIPTION	PART NUMBER	QUANTITY
Fuel Tank (SULEV – Cal, QG18DE *)	17202-ZG00A	1
Fuel Tank (Fed, QG18DE and all QR25DE *)	17202-ZG00B	1
EVAP Canister (SULEV - Cal, QG18DE *)	14950-8U310	1 (If Needed)
EVAP Canister (Fed, QG18DE and all QR25DE *)	14950-8U300	1 (If Needed)
O-Ring – Fuel Sending Unit (SULEV – Cal, QG18DE *)	17342-5M047	1 (If Needed)
O-Ring – Fuel Sending Unit (Fed, QG18DE and all QR25DE *)	17342-01A00	1 (If Needed)

^{*} Check the under-hood emission label to see if you're working on a "SULEV – California" or "Federal" emission vehicle.



CLAIMS INFORMATION

Submit a Campaign (CM) line claim using the following claims coding:

"CM" I.D.: PM501

DESCRIPTION	OP CODE	FRT
R&I Fuel Tank, Test (OK)	PM5013	1.3 hrs

<u>OR:</u>

DESCRIPTION	OP CODE	FRT
 R&I Fuel Tank, Test (NG) R&I EVAP Canister, Test (OK) RPL Fuel Tank Reinstall EVAP Canister 	PM5014	1.6 hrs

OR:

DESCRIPTION	OP CODE	FRT
 R&I Fuel Tank, Test (NG) R&I EVAP Canister, Test (NG) RPL Fuel Tank RPL EVAP Canister 	PM5015	1.6 hrs

OWNER'S LETTER

Dear Nissan Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. Nissan has decided that a defect that relates to motor vehicle safety exists in some 2005 model year Nissan Sentra vehicles.

Reason for Recall

A vapor hose located inside the fuel tank may not have been formed correctly in the manufacturing process. When the vehicle is parked with a full fuel tank, fuel may flow into the vapor hose, which is connected to a vapor canister. If the vehicle is parked for a long enough time, the vapor canister could become full, and excess fuel could spill out onto the ground. This could result in a fire if an ignition source is present.

What Nissan Will Do

Your Nissan dealer will check the vapor hose connections in the fuel tank to determine if a poor seal exists. If a poor seal is identified, a new fuel tank will be installed. This free service should take about two hours to complete, but your Nissan dealer may require your vehicle for a longer period of time based upon the dealer's work schedule.

What You Should Do

Contact your Nissan dealer at your earliest convenience in order to arrange an appointment to have your vehicle repaired. Please bring this notice with you when you keep your service appointment. It will be necessary that your fuel tank be no more than one-quarter full when you bring your vehicle to the dealer in order to minimize the possibility of fuel spill during the inspection. Instructions have been sent to your Nissan dealer. If the dealer fails, or is unable to make the necessary repairs free of charge, you may contact the National Consumer Affairs Office, Nissan North America, Inc. at P.O. Box 191, Gardena, California 90248-0191. The toll free number is 1-800-NISSAN1 (1-800-647-7261). You may also contact the Administrator of the National Highway Traffic Safety Administration, 400 Seventh Street SW, Washington, D.C. 20590 or call the toll free Safety Hotline at (888) 327-4236.

Federal regulations require that any vehicle lesser receiving this recall notice must forward a copy of this notice to the lessee within ten days.

Thank you for your cooperation. We are indeed sorry for any inconvenience this may cause you.