



RECALL CAMPAIGN BULLETIN

Reference:

NTB08-067b

Date:

August 13, 2008

VOLUNTARY RECALL CAMPAIGN 2007 – 2008 SENTRA BRAKE MASTER CYLINDER

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| <p>This bulletin has been amended. Instructions to clean special tool J-49749 between each use have been added. Please discard earlier versions.</p> |
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CAMPAIGN ID #: PM813
NHTSA # 08V-311
APPLIED VEHICLES: 2007 – 2008 Sentra (B16)

Refer to Service COMM to confirm campaign eligibility.

INTRODUCTION

Nissan has decided that a defect that relates to motor vehicle safety exists in some 2007 and 2008 Model year Nissan Sentra vehicles. The master cylinder assembly may have been manufactured out of specification. In some cases, this may lead to a brake fluid leak. If the amount of brake fluid in the reservoir drops, the brake warning light will illuminate on the dash indicating low brake fluid level. If driven for an extended period time in this condition, the vehicle could experience longer stopping distances than normal, which could result in a crash. To remedy this potential condition, Nissan is conducting this Voluntary Recall Campaign to inspect, and if necessary, replace the brake master cylinder at no charge for parts or labor.

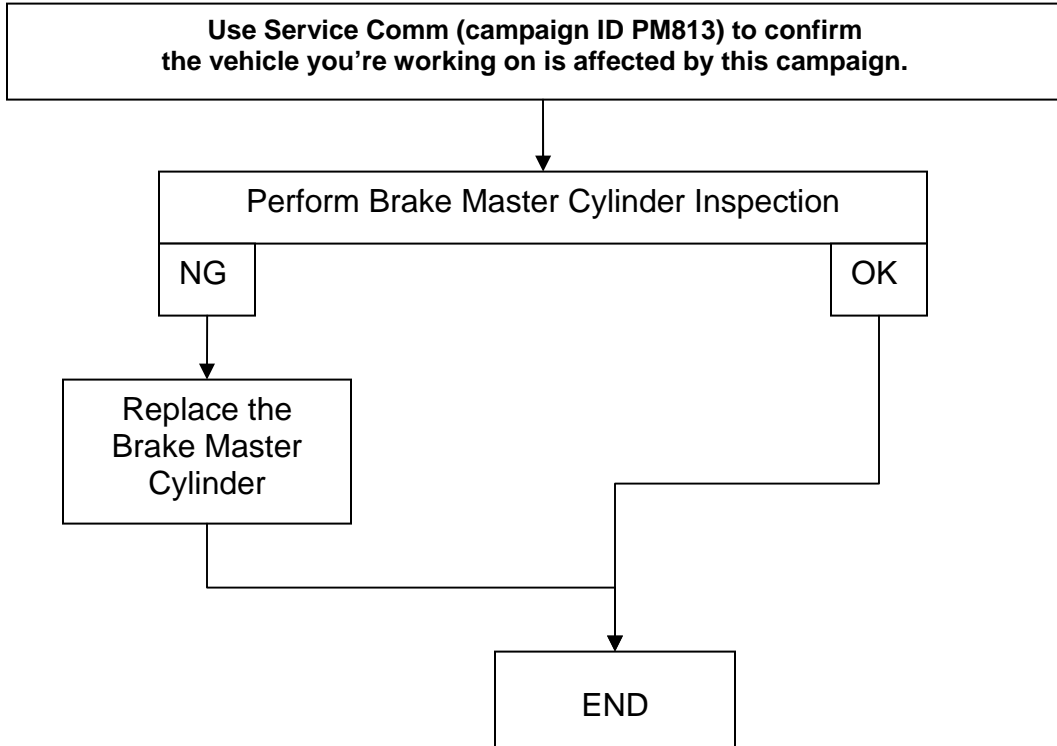
IDENTIFICATION NUMBER

Nissan has assigned identification number PM813 to this campaign. This number must appear on all communications and documentation of any nature dealing with this campaign.

DEALER RESPONSIBILITY

It is the dealer'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 sale. 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 Overview



REQUIRED SPECIAL TOOL J-49749

Additional tools can be ordered from TECH-MATE at 1-800-662-2001.



Figure A

SERVICE PROCEDURE

Brake Master Cylinder Inspection

1. Remove the air intake tube/boot between the air cleaner assembly and intake manifold (see Figure 1).
 - a. Loosen the 2 band clamps.
 - b. Remove the clip that holds the vent tube.
 - c. Release the spring clamp.
 - d. Remove the intake tube/boot.

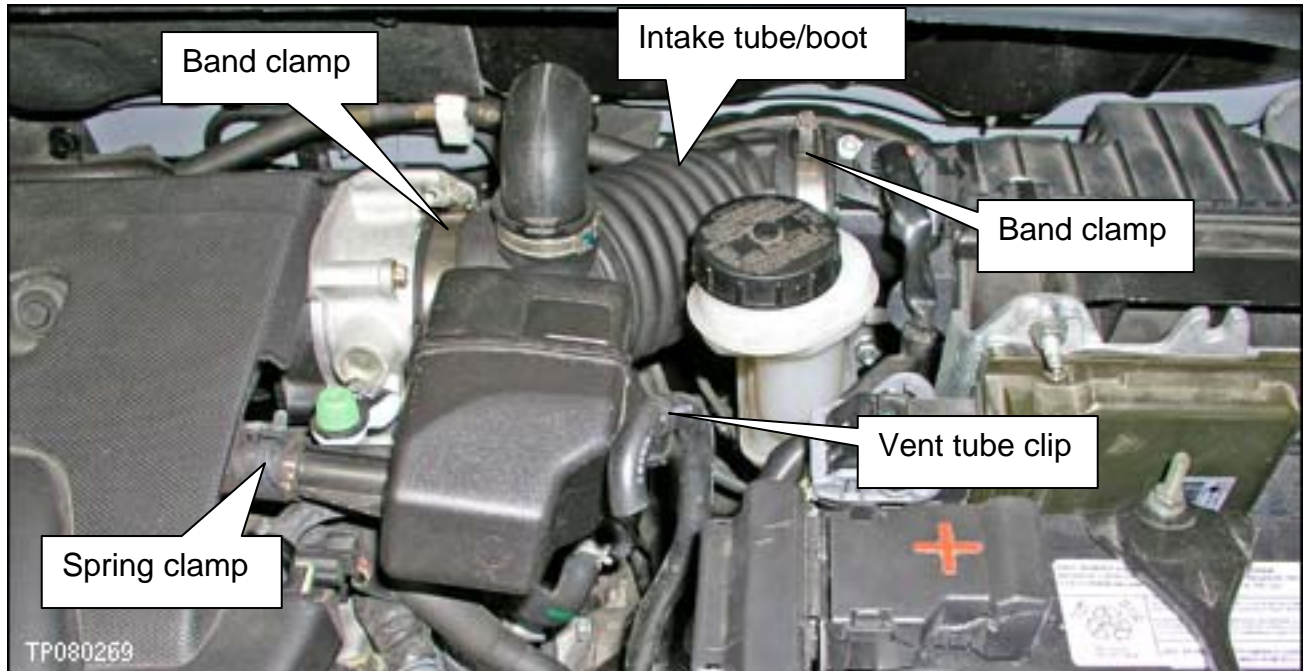


Figure 1

- Carefully pull the vacuum tube from the brake booster (see Figure 2).
- Remove the rubber grommet from the brake booster (see Figure 2).

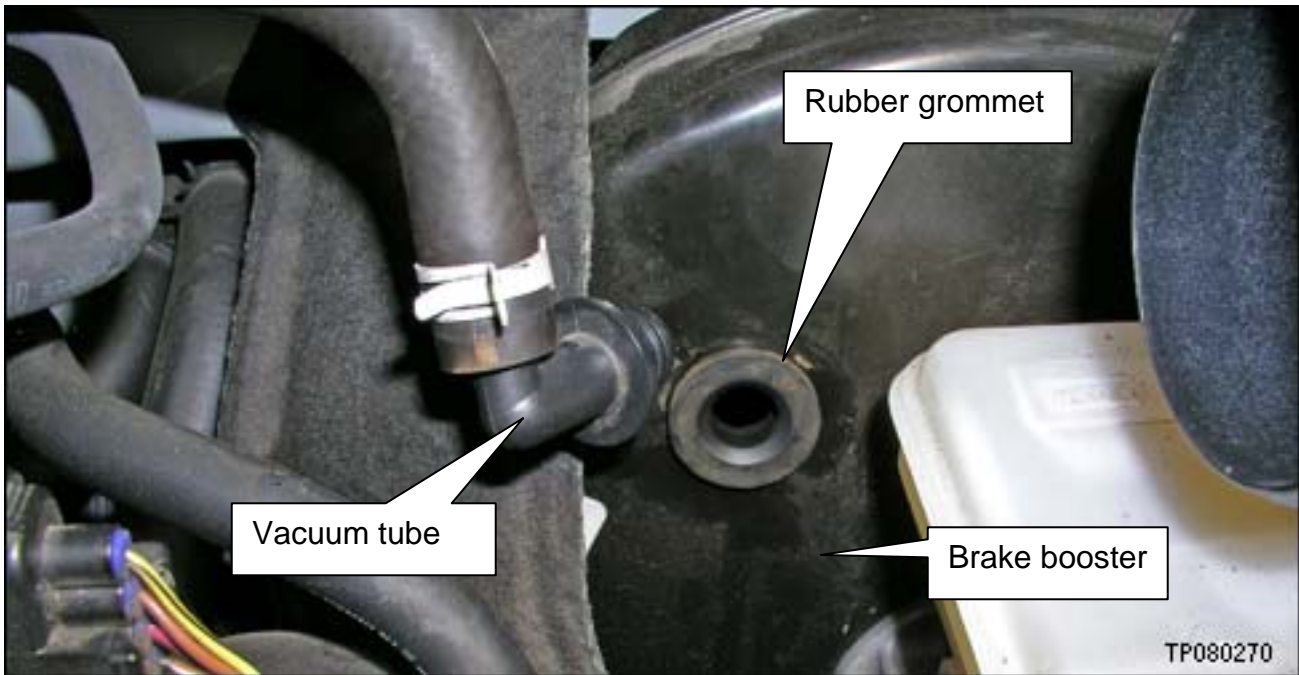


Figure 2

- Cover fenders and painted areas to protect them from possible brake fluid splashing.

CAUTION: If brake fluid is splashed on painted surfaces, immediately wipe off with a clean soft cloth and wash with water.

IMPORTANT

- In the next step you will be using special tool J-49749.
- All residual brake fluid MUST be cleaned / removed from the collection container and tubing before each use.**
- Any brake fluid left in the container or tubing from a previous test will make the next test results invalid.

5. Connect Special Tool J-49749 as shown in Figure 3.

- Use shop air supply pressure between 90 and 120 psi.

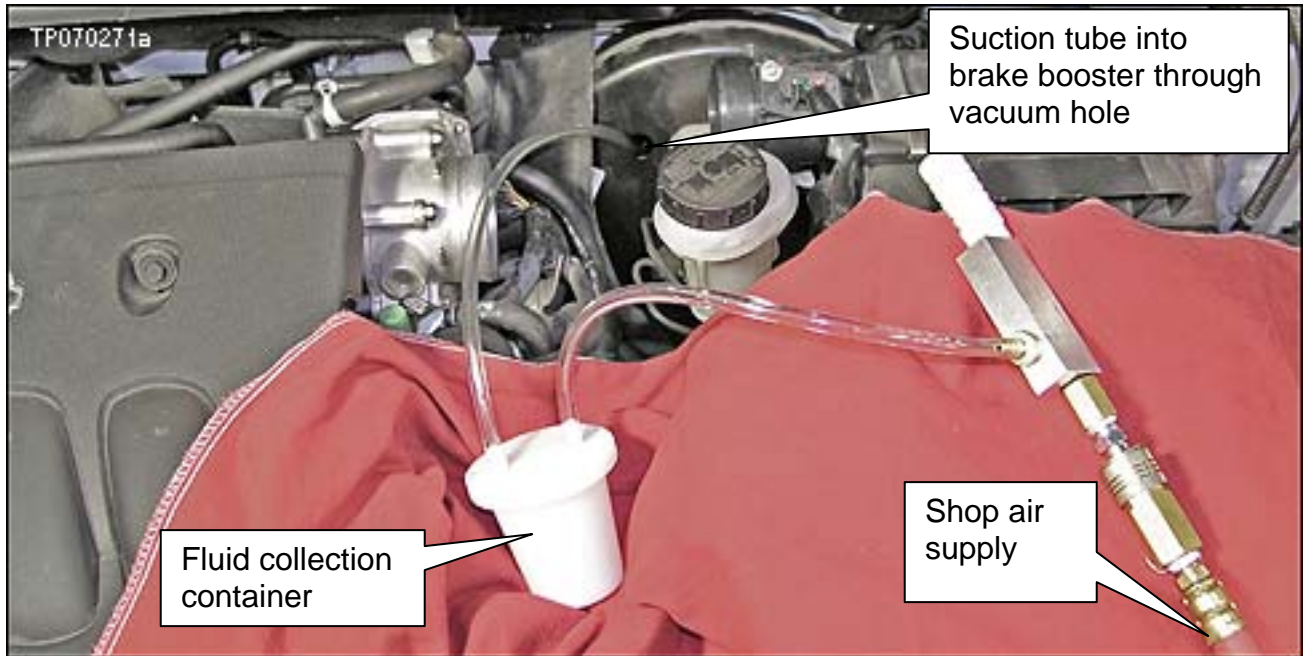


Figure 3

6. Move/position the suction tube inside the brake booster so that any fluid in the lower area of the brake booster is sucked into the collection container.

NOTE: If there is fluid in the lower area of the booster:

- Keep the collection container upright.
- If the collection container fills to within $\frac{1}{2}$ inch of the top, empty it and then continue.
- Continue suction until all of the fluid is removed.



Figure 4

7. After you have removed any / all fluid from the brake booster, disconnect the tool and check the collection container.

No fluid in the container – OK

- Reinstall all parts removed.
- Make sure the brake fluid reservoir is full.
- Return the vehicle to the customer.

Any amount of fluid in the container – NG

- Go to “Replace the Brake Master Cylinder” on the next page.

IMPORTANT

- Make sure to clean special tool J-49749 after each use.
- **All residual brake fluid must be cleaned / removed from the collection container and tubing before it is used again.**
- Any brake fluid left in the container or tubing from a previous test will make the next test results invalid.

Brake Master Cylinder Replacement

1. Write down the radio station presets.

| Presets | 1 | 2 | 3 | 4 | 5 | 6 |
|---------|---|---|---|---|---|---|
| A | | | | | | |
| B | | | | | | |
| C | | | | | | |

2. Remove the battery from the vehicle.
 - a. Disconnect the battery cables (negative cable first).
 - b. Remove the battery hold down.
 - c. Lift the battery from the vehicle.



Figure 5

3. Remove the 2 clips from the intake inlet duct and then remove the duct.

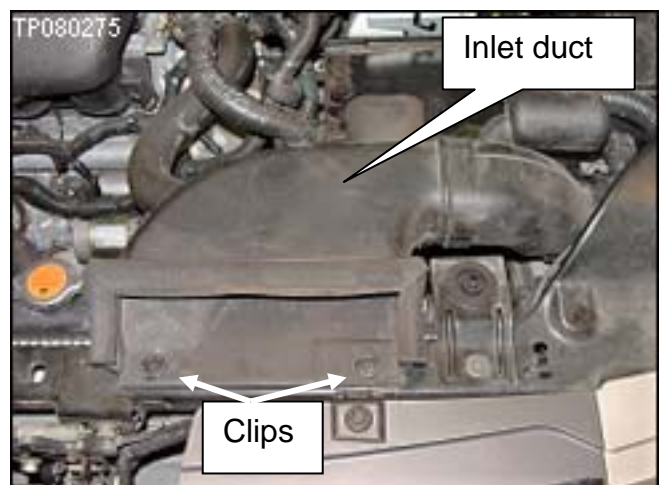


Figure 6

4. Remove 2 bolts shown in Figure 7 and move the main harness forward.

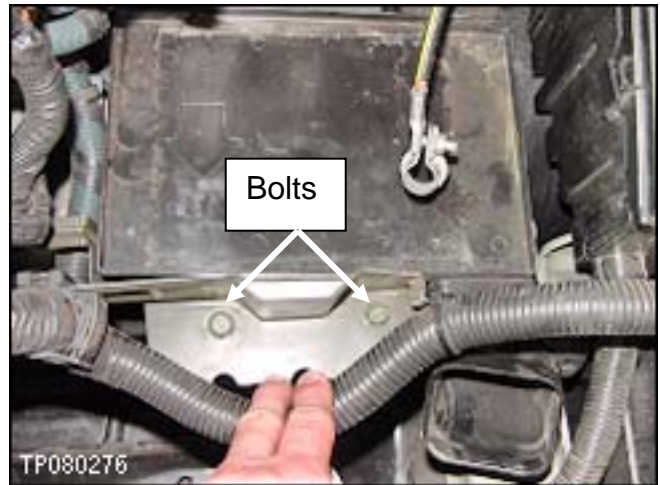


Figure 7

5. Remove the battery tray.

NOTE: The battery tray is part of the intake duct and is attached at the front and rear.

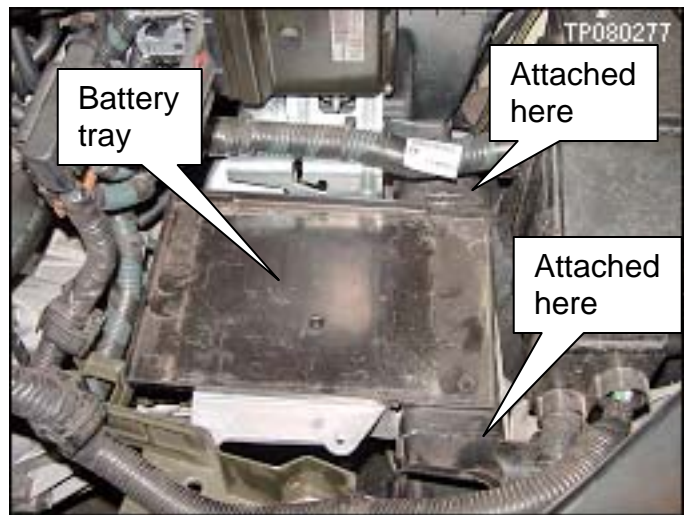


Figure 8

6. Remove 2 bolts from the ECU support bracket.

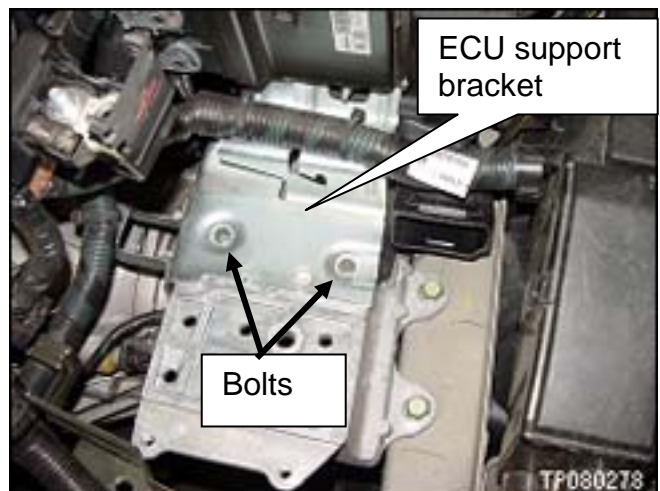


Figure 9

7. Disconnect the brake fluid level sensor connector.



Figure 10

8. Disconnect the air flow meter and the harness clip.

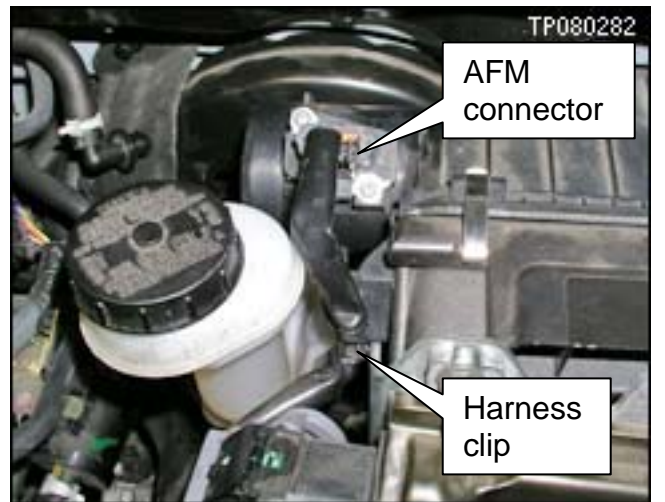


Figure 11

9. Hold the ECU forward and carefully remove the air cleaner assembly.

NOTE: Don't lose the rubber mount bushings for the air cleaner assembly.



Figure 12

10. Drain the fluid from the brake master reservoir as follows:

- a. Make sure the parking brake set.
- b. Attach a vinyl tube with catch container to a caliper bleed valve.
- d. Open the bleed valve.
- e. Slowly pump the brake pedal until the brake fluid reservoir is empty.

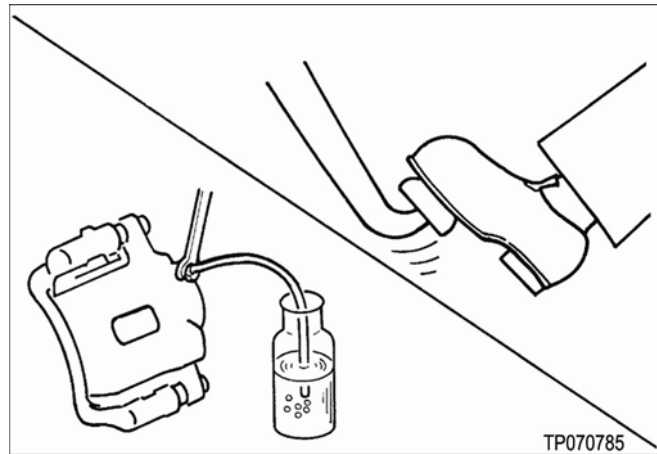


Figure 13

CAUTION:

- If equipped with manual transmission, do not push the clutch pedal when the reservoir is empty or you will need to bleed the clutch system.
- If brake fluid is splashed on painted surfaces, immediately wipe off with a soft cloth and wash with water.

11. If equipped with manual transmission, remove the fluid supply tube for the clutch master cylinder.

CAUTION: Do Not push the clutch pedal when the reservoir is empty or you will need to bleed the clutch system.



Figure 14

12. Disconnect the 2 brake lines.

13. Remove the 2 nuts for the brake master cylinder and remove the master cylinder.

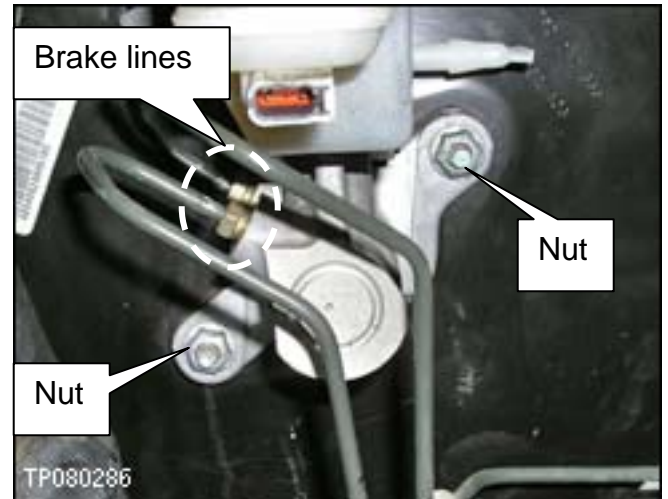


Figure 15

14. Prepare for installation of the new master cylinder:

- Clean the brake booster in and around the hole for the master cylinder.
- Make sure the brake master cylinder to booster seal is in place and fully seated as shown in Figure 16.
- Make sure the primary piston and seal are clean and free of any debris.

CAUTION:

- **Do Not scratch the master cylinder primary piston.**
- **Do Not allow the primary piston to contact the brake booster during installation.**

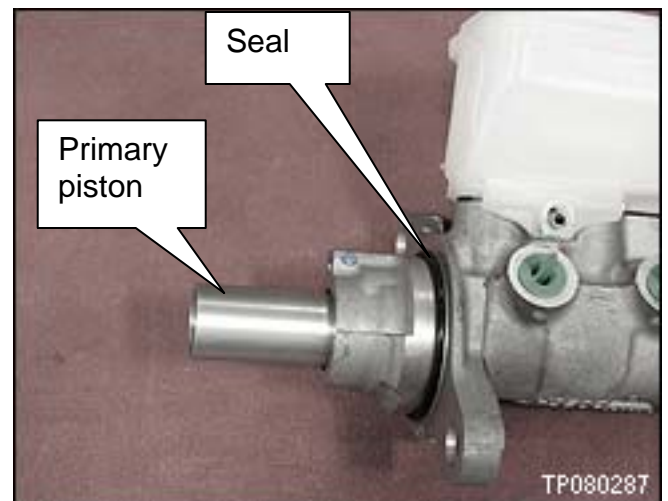


Figure 16

15. Install the brake master cylinder and tighten the nuts.

- Nut Torque:
19.6 N.m (2.0 kg-m, **14 ft-lb**)

16. Attach the brake lines.

- Brake line flare nut torque:
17 N.m (1.7 kg-m, **12 ft-lb**)

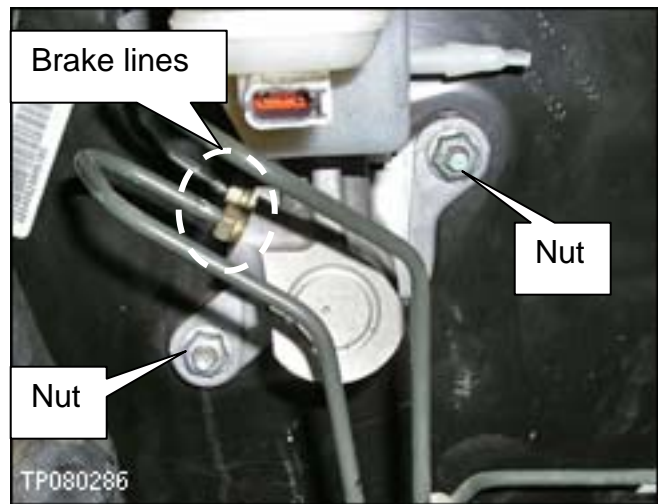


Figure 17

17. If equipped with manual transmission, install the fluid supply tube for the clutch master cylinder.

CAUTION: Do Not push the clutch pedal when the reservoir is empty or you will need to bleed the clutch system.



Figure 18

18. Hold the ECU forward and carefully install the air cleaner assembly.

NOTE: Make sure all of the rubber mount bushings are in place.



Figure 19

19. Connect the brake fluid level sensor.



Figure 20

20. Connect the air flow meter and the harness clip.

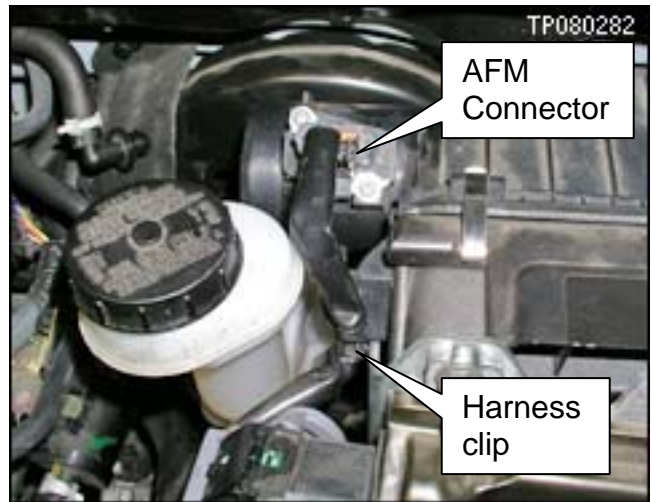


Figure 21

21. Install 2 bolts for the ECU support bracket.

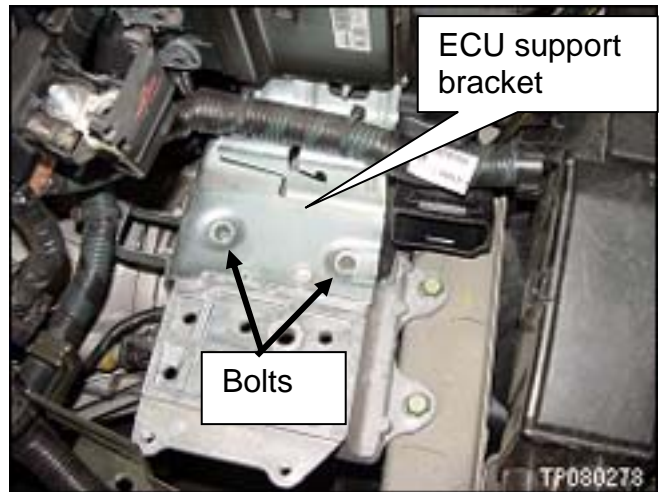


Figure 22

22. Install the battery tray.

NOTE: The battery tray is part of the intake duct and must be attached at the front and rear.

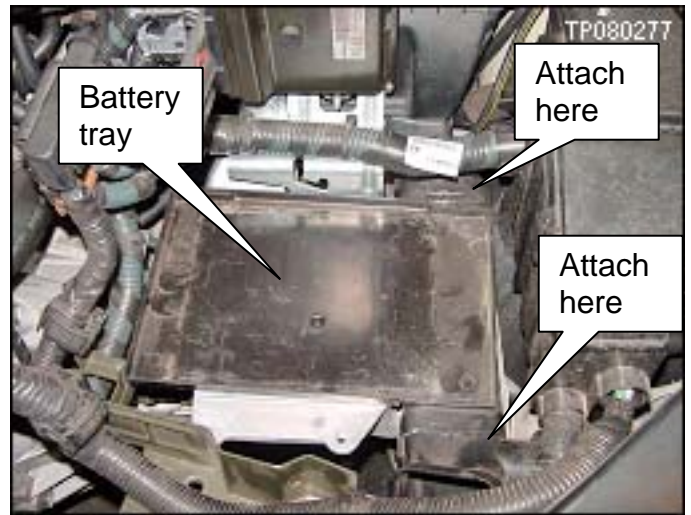


Figure 23

23. Install the 2 bolts shown in Figure 24.

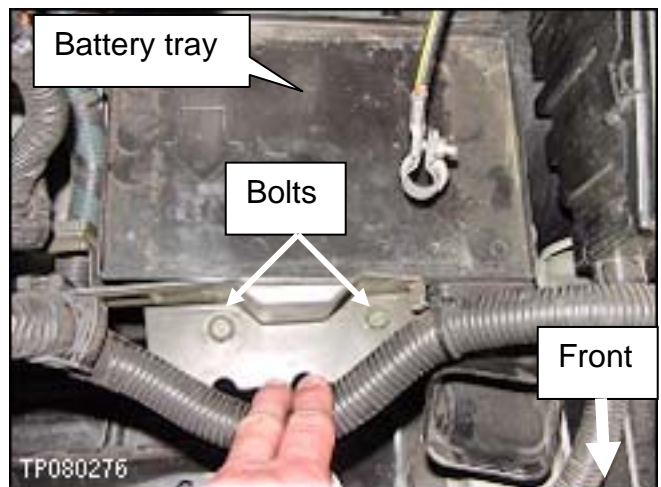


Figure 24

24 Install the intake inlet duct and the 2 securing clips.

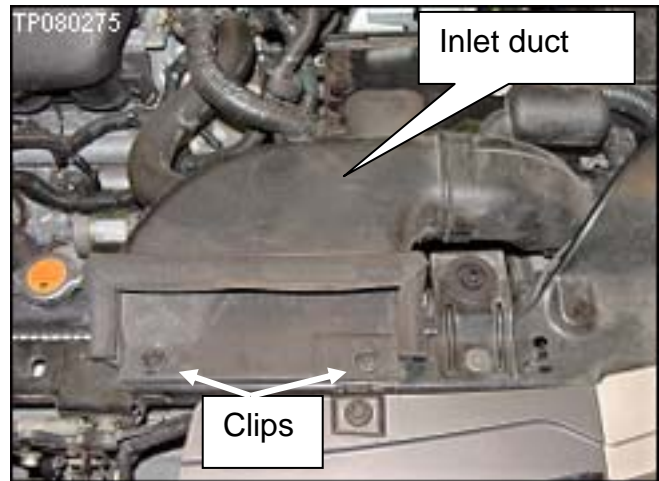


Figure 25

25. Install the vacuum tube rubber grommet into the brake booster (see Figure 26).

26. Carefully install / push the vacuum tube into the brake booster (see Figure 26).

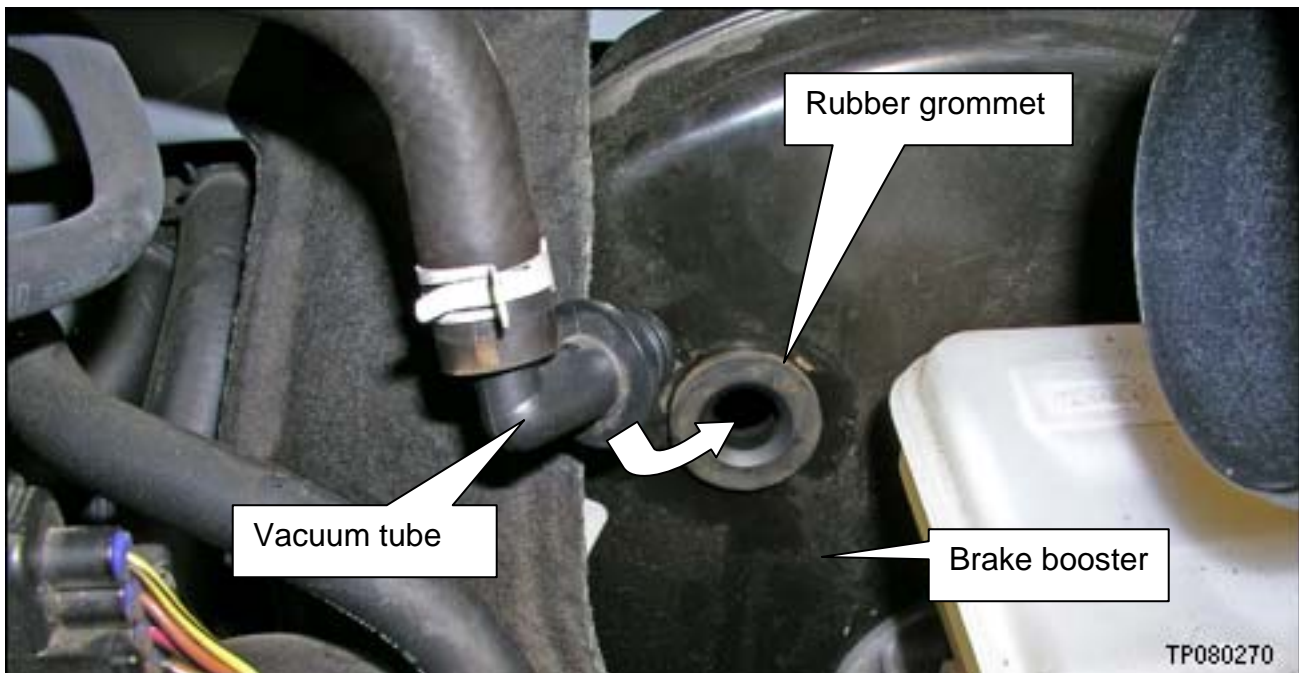


Figure 26

27. Install the air intake tube/boot between the air cleaner assembly and intake manifold (see Figure 27).
- Tighten the 2 band clamps.
 - Install the clip that holds the vent tube.
 - Position the spring clamp correctly.

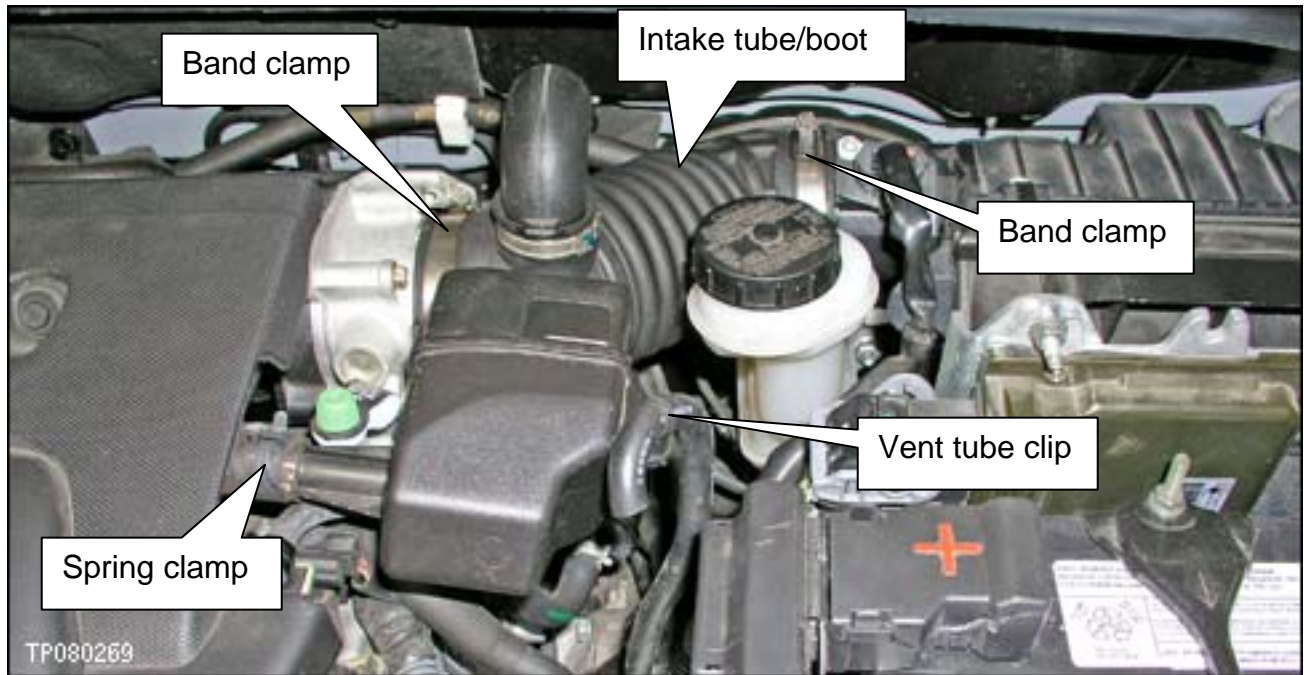


Figure 27

28. Install the battery and the battery hold down bracket.

29. Attach the battery cables (positive cable first).

30. Reset the clock and the radio presets.

31. Perform the following initialization / learning items:

- Accelerator Pedal Released Position Learning
- Throttle Valve Closed Position Learning
- Idle Air Volume Learning
- Sunroof Memory Initialization – if equipped
- Power Window System Initialization

If needed, refer to the Service Manual for information on the above items.

32. Bleed air from the brake system as follows:

NOTE:

- Keep brake fluid reservoir filled at least half full while performing the brake bleeding procedure.
- Use a new fresh sealed bottle of genuine Nissan Super Heavy Duty Brake Fluid (P/N 999MP-A4100P).

a. Attach a vinyl tube with catch container to the right rear brake caliper or wheel cylinder bleed valve.

b. Fully depress brake pedal 4 to 5 times.

c. With brake pedal depressed, loosen bleed valve to let the air out, and then tighten it immediately.

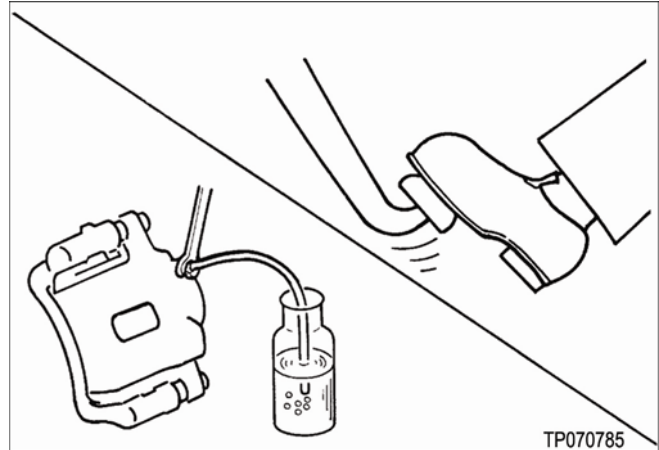


Figure 28

d. Repeat steps b and c until no more air comes out.

e. Tighten bleed valve. Torque to 7.8 N.m (0.8 kg-m, **69 in-lb**).

f. Repeat steps a to e for the other wheels in the following order:

Left Front > Left Rear > Right Front

33. If equipped with manual transmission, make sure the clutch is operating correctly by pumping/cycling the clutch pedal 3 or 4 times.

PARTS INFORMATION

| DESCRIPTION | TRANSMISSION TYPE | PART # | QUANTITY |
|-----------------------|-------------------|----------------|----------|
| Brake Master Cylinder | CVT | 46010 – ET010C | 1 |
| | M/T | 46010 – ET000C | |

CLAIMS INFORMATION

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

“CM” I.D.: PM813

| DESCRIPTION | OP CODE | FRT |
|------------------------------------|---------|-----|
| Inspect Brake Master Cylinder - OK | PM8130 | 0.3 |

OR

| DESCRIPTION | OP CODE | FRT |
|--|---------|-----|
| Inspect Brake Master Cylinder NG, RPL Brake Master Cylinder | PM8131 | 1.5 |

Expense Codes:

| EXPENSE CODE | DESCRIPTION | MAX. AMOUNT |
|--------------|-------------|-------------|
| 006 | Brake Fluid | \$5.25 |

Genuine Nissan Super Heavy Duty Brake Fluid (P/N 999MP-A4100P) is available from the Nissan Direct Ship Chemical Care Product Program: Phone 1-800-811-0502, Fax 1-770-218-0148, Website order link via dealer portal www.NNAnet.com or direct www.NissanChemicals.com

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 2007 and 2008 Model Year Nissan Sentra vehicles. Our records indicate that you own or lease the Nissan vehicle identified by the VIN on the cover of this notice.

Reason for Recall

The master cylinder assembly in your vehicle may have been manufactured out of specification. In some cases, this may lead to a brake fluid leak. If the amount of brake fluid in the reservoir drops, the Brake Warning Light will illuminate on the dash indicating low brake fluid level. If driven for an extended period time in this condition, the vehicle could experience longer stopping distances than normal, which could result in a crash.

What Nissan Will Do

Your Nissan dealer will inspect the master cylinder assembly for leaks. If brake fluid leakage is detected, Nissan will replace the master cylinder with a new one at no cost to you for parts or labor. This service should take about 2 hours to complete, but your Nissan dealer may require your vehicle for a longer period of time based upon the workshop schedule, or parts availability.

What You Should Do

Contact your Nissan dealer at your earliest convenience in order to arrange an appointment to have your vehicle inspected and, if necessary, repaired. Please bring this notice with you when you keep your service appointment. Instructions have been sent to your Nissan dealer.

If you notice that the Brake Warning Light in your Sentra is illuminated, we strongly urge you to immediately check the brake fluid level in your vehicle and add additional DOT 3 brake fluid if necessary. The instructions are in Section 8 of your Owners Manual. Do not continue driving with the Low Brake Fluid Warning Light on.

If you have additional questions you may contact the National Consumer Affairs Department, Nissan North America, Inc., P.O. Box 685003, Franklin, TN 37068-5003. The toll free number is 1-800-NISSAN1 (1-800-647-7261). You may also submit a complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590; or call the toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY: 1-800-424-9153); or go to <http://www.safercar.gov>.

Federal law requires that any vehicle leaser 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.