

AT08-001

MISSAN

NTB08-042

Date: April 3, 2008

2007 MAXIMA; MIL 'ON' W/DTC P0840 OR P0845

APPLIED VEHICLE: 2007 Maxima (A34)

IF YOU CONFIRM

The MIL is 'ON' with one of the following DTC stored in the TCM:

 DTC P0840 – TRANSMISSION FLUID PRESSURE SENSOR A CIRCUIT (SEC PRESSURE SENSOR)

or

 DTC P0845 – TRANSMISSION FLUID PRESSURE SENSOR B CIRCUIT (PRI PRESSURE SENSOR)

NOTE:

- If <u>both</u> P0840 and P0845 are stored, this bulletin does not apply.
- If other DTCs are combined with P0840 or P0845, resolve the other codes first.
- If you observe abnormal CVT fluid color or odor, excessive contamination in the oil pan, and/or you can isolate an unusual noise coming from the transmission, this TSB does not apply.
- If needed, refer to ASIST and the Service Manual for further diagnostic information.

ACTIONS

<u>If DTC is P0845:</u> Replace the Primary Oil Pressure Sensor Assy. with the one listed in the Parts Information section of this bulletin.

<u>If DTC is P0840:</u> Replace the Secondary Oil Pressure Sensor Assy. with the one listed in the Parts Information section of this bulletin.

IMPORTANT: The purpose of "ACTIONS" (above) is to give you a quick idea of the work you will be performing. You MUST closely follow the <u>entire</u> Service Procedure as it contains information that is essential to successfully completing this repair.

Nissan Bulletins are intended for use by qualified technicians, not 'do-it-yourselfers'. Qualified technicians are properly trained individuals who have the equipment, tools, safety instruction, and know-how to do a job properly and safely. NOTE: If you believe that a described condition may apply to a particular vehicle, DO NOT assume that it does. See your Nissan dealer to determine if this applies to your vehicle.

PARTS INFORMATION

DESCRIPTION	PART #	QUANTITY	
Oil Pressure Sensor Assy – Primary	21026 17404	1	
Oil Pressure Sensor Assy – Secondary	31930-17AUA	I	
Gasket oil pan	31397-1XD00	1	
Nissan CVT Fluid	999MP-NS200P	8 Qts.	
Seal -lip	31528-1XA01	2	
Bolt -hex	01121-03071	5	
Bolt	31377-1XA04	2	
Bolt-flange hex	081A0-6301A	4	
Seal-O ring, drain plug	31526-1XA01	1	
Bolt	31377-1XD07	20	

CLAIMS INFORMATION

Submit a Primary Failed Part (PP) line claim using the following claims coding:

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Replace Primary Oil Pressure	(1)	JX08AA	HD	32	1.2
Sensor Assy.					

(1) Reference the Parts Information Table and use the Oil Pressure Assy P/N as the PFP.

<u>OR</u>

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Replace Secondary Oil Pressure	(1)	JX09AA	HD	32	1.6
Sensor Assy. (includes R & R					
valve body)					

(1) Reference the Parts Information Table and use the Oil Pressure Assy P/N as the PFP.

SERVICE PROCEDURE

Step A: Remove the oil pan.

CAUTION: Transmissions are very vulnerable to particles (dust, metal, etc.).

- When removing the oil pan or removing a CVT valve body, make sure your work environment (shop, workbench, etc.), transmission area (sub-frame, oil pan, harness connector, etc.), and your hands are free of contamination.
- Make sure all parts are clean prior to installing on the vehicle.
- Wait to unpack Service Parts until just before installation.
- 1. Write down all radio station presets.

Presets	1	2	3	4	5	6
Α						
В						
С						

- 2. Disconnect both battery cables; negative cable first.
- 3. Remove the CVT dipstick. Raise the vehicle on a hoist.
- 4. Remove the undercover from below the front bumper cover (see Figure 1).



Figure 1

- 5. Remove the transmission pan drain plug and drain the CVT fluid.
- 6. Loosen and remove the 20 oil pan bolts to remove the oil pan.
- 7. **DECISION:**
 - If DTC **P0845** is stored, proceed to **Step B: Replace Primary Oil Pressure Sensor Assy.**
 - If DTC **P0840** is stored, proceed to **Step C: Replace Secondary Oil Pressure Sensor Assy.**

Step B: Replace Primary Oil Pressure Sensor Assy. (For P0845 only)

- 1. Remove the Primary Oil Pressure Sensor Assy
- 2. Replace it with the one listed in the Parts Information section of this bulletin.

TORQUE: 10.8-14.7 N.m (1.1-1.5 kg-m, **95.6-130.1 in-lb**)

3. Continue to Step D: Closure – page 11.





Step C: Replace Secondary Oil Pressure Sensor Assy. (For P0840 only)

 Disconnect the CVT harness connector F6 by turning in the direction shown in Figure 3.



Figure 3



Figure 4



Figure 5

2. Remove the nut and lock nut to remove the manual plate.

3. Remove the collar from the manual shaft.

- 4. Remove the large lock ring holding the CVT connector to the transmission case (see Figure 6).
 - Push the transmission side of the harness down inside the transmission case to remove it.



Figure 6

• Transmission side of CVT harness connector and lock ring shown removed from the transmission case.



Figure 7

5. Disconnect the harness of the Primary oil pressure sensor assy.



Figure 8

- 6. Remove the bolts attaching the valve body to the transmission (see Figure 9).
 - There are 11 bolts shown and numbered for convenience.
 - There are 3 different length bolts which are identified by:
 - <u>S</u>-short
 - <u>M</u>-medium
 - <u>L</u>-long



Figure 9

- 7. Remove the valve body.
 - Note the position of the Ratio Control Valve and attached shift link.



Figure 10

- 8. Make sure you replace the 2 lip seals shown in Figure 11.
 - Do not reuse the old lip seals.
 - Use petroleum jelly to keep the new lip seals in place during reassembly.



Figure 11

- 9. Carefully remove the valve body assembly, being careful not to allow the Ratio Control Valve to fall out.
 - If the Ratio Control Valve does fall out, check the condition of all surfaces especially the edges for damage.
 - Confirm (double check) the direction of the shift link and the bottom of the shift link around the step motor pin (see Figure 12).



Figure 12

10. On a clean and lint-free surface, stand the valve body on-end and hold it as shown in Figure 13.

Remove the Secondary Oil Pressure Sensor.



Figure 13

11. Replace the Secondary Oil Pressure Sensor Assy. with the one listed in the Parts Information section of this bulletin.

TORQUE: 10.8-14.7 N.m (1.1-1.5 kg-m, **95.6-130.1 in-lb**)



Figure 14



Figure 15

12. Install the valve body and shift link with the fork end of the shift link around the pin as shown in Figure 15.

13. While you are doing Step 12 above, the lower end of the shift link must stick through the bottom of the step motor pin as shown in Figure 16.



Figure 16

14. Install finger tight the 11 valve body bolts removed in Step 6.

IMPORTANT CHECKS:

- After you install the new valve body, make sure the upper end (forked end) of the shift link is positioned around the pin. Space is very limited in the work area.
- Install the CVT dip stick and make sure there is adequate clearance between the dipstick and the harness.

15. Torque the 11 valve body bolts.

- Tightening torque: 6.9-8.9 N.m (0.7-0.9 kg-m, 61-78 in-lb).
- Torque sequence as per Figure 9: 6-7-5-8-4-9-3-10-2-11-1.

16. Re-install the collar on the manual shaft (see step 3, Figure 5).

17. Align the manual plate with the notch in the manual valve.

NOTE: First, tighten 19 mm nut, then tighten the 14 mm lock nut with the specified tightening torque.

• Use a Torque wrench to tighten both the 14 mm and 19 mm nuts; same torque specification for both:

TORQUE: 20.6-23.5 N.m (2.1-2.3 kg-m, **15.1 - 17.3 ft-lb**)



Figure 17

18. Reconnect the harness to the primary oil pressure sensor (see step 5, Figure 8).

19. Reinsert the CVT connector with locking ring into the case as shown in step 4, Figure 6. Make sure that the locating notch is properly engaged.

Step D: Closure.

- 1. Install the oil pan and bolts.
 - Make sure oil pan and magnets are free of contamination particles.
 - Tightening Torque: 5.4 7.4 N.m (0.5-0.7 kg-m, **47.8 65.5 in-lb**).
- 2. Install the battery cables, negative cable last.
- 3. Fill and check the CVT fluid level.
- 4. Reprogram the radio presets.
- 5. Reset the clock.
- 6. Initialize the power windows and sunroof as applicable. Reference the Electronic Service Manual as needed.
- 7. Using C-III, make sure to erase DTCs from all Systems.
- 8. Test drive the vehicle and make sure it operates correctly and the Check Engine light is OFF.
 - If the Check Engine light comes ON; diagnose, perform repairs, and erase DTCs.
 - Diagnosis and repairs beyond the Oil Pressure Sensor Assy. replacement are not covered by this bulletin.