

Classification:

EC16-003a

Reference:

August 12, 2016

Date:

2013 – 2015 SENTRA; MIL ON WITH DTC P0101

NTB16-027a

This bulletin has been amended throughout. Discard all previous versions of this bulletin.

APPLIED VEHICLE: 2013 – 2015 Sentra (B17)

IF YOU CONFIRM

The MIL is ON with DTC P0101 (MAF SEN/CIRCUIT-B1) stored.

and

There are no drivability issues.

ACTION

1. For 2013 and 2014 models only:

- Inspect the color of the PCV valve, replace if the color is orange (see Figure 1a on page 2).
- 2. For 2013-2015 models: Clean the throttle valve and chamber of the electronic throttle control actuator.
- 3. For 2013-2015 models: Reprogram the ECM.
 - Refer to step 6 in the ECM Reprogramming/Confirmation section of the SERVICE PROCEDURE to confirm if reprogramming is needed.

IMPORTANT: The purpose of **ACTION** (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.

SERVICE PROCEDURE

Inspect / Replace PCV Valve (2013- 2014 Sentra Only)

- 1. Open the engine hood and locate the PCV valve.
- 2. Inspect the color of the PCV valve.

If the PCV valve is orange, as shown in Figure 1a:

- Replace the PCV valve.
- Refer to the Electronic Service Manual (ESM), section **EM-Engine Mechanical**, for replacement information.
- Install the new PCV valve listed in **PARTS INFORMATION**.

NOTE: The new PCV valve is "black" color.

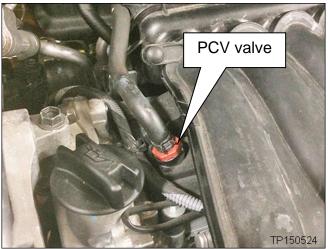


Figure 1a

If the PCV valve is black:

• DO NOT replace – continue with the **SERVICE PROCEDURE**.

Go to the next page.

- 1. Remove the electronic throttle control actuator (ETC).
 - Refer to the ESM, section **EM-Engine Mechanical**, for ETC removal.
- 2. On the engine-side of the ETC, clean off deposits on the chamber and throttle valve.

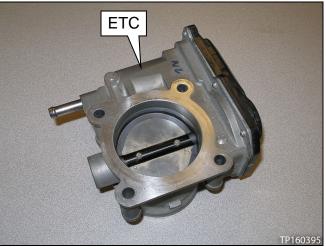


Figure 2a

- 3. Spray "carburetor" cleaner on a clean cloth towel.
 - Do not use a paper towel.
 - For warranty repairs, use only Nissan Genuine Low VOC Non-Chlorinated Carburetor Cleaner.
 - For non-warranty repairs, Nissan Genuine Low VOC Non-Chlorinated Carburetor Cleaner is recommended, but an equivalent "carburetor" cleaner may be used.
 - > See **PARTS INFORMATION** for further details.

CAUTION: <u>Do not spray directly on the ETC chamber</u>. Damage may occur to the electronics of the ETC.

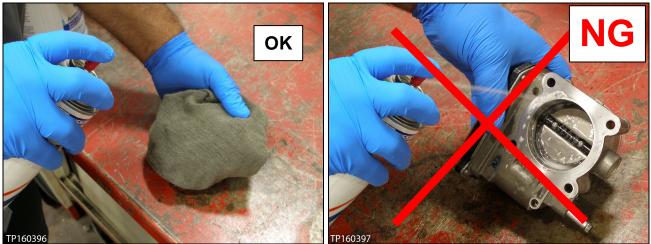


Figure 3a

Figure 4a

- 4. Clean the throttle valve and chamber with the soaked cloth towel.
 - Clean off the deposits from the edges and outer ends of the throttle valve (see Figure 5a).
 - Clean off the areas of the chamber where the throttle valve meets up to and around it.
 - ➤ Hold the valve open to access these areas.

CAUTION:

- Do not use excessive force when opening the throttle valve.
- o Be careful not to scratch the throttle valve or chamber areas during cleaning.

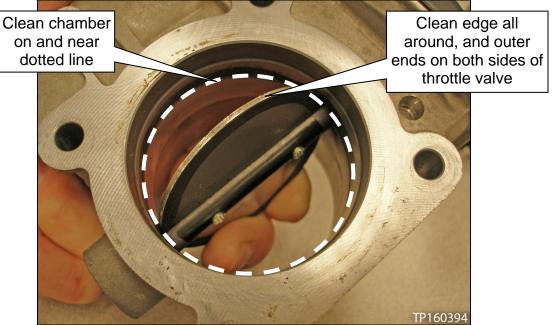


Figure 5a

- 5. The cleaning is complete when unobstructed clearance is seen between the throttle valve and chamber (see Figure 6a).
 - Looking at the clearance while shining a light from behind will help confirm proper cleaning.
- 6. Reinstall the ETC.
 - Refer to the ESM, section EM-Engine Mechanical, for ETC installation.



Figure 6a

- Install a new ETC gasket.
 - > Do not reuse the old ETC gasket.
- 7. Refer to step 6 in the ECM Reprogramming/Confirmation section of the SERVICE PROCEDURE to confirm if reprogramming is needed.

NOTE: Throttle Valve Closed Position Learning and Idle Air Volume Learning is included in the reprogramming procedure.

- 8. If ECM reprogramming is not needed, refer to the ESM, section **EC-Engine Control**, and perform Idle Air Volume Learning (IAVL). This includes:
 - Accelerator Pedal Position Learning, and
 - Throttle Valve Closed Position Learning.

ECM Reprogramming/Confirmation

NOTE:

- Most instructions for reprogramming with CONSULT-III plus (C-III plus) are displayed on the CONSULT PC screen.
- If you are not familiar with the reprogramming procedure, *click here*. This will link you to the "CONSULT-III plus (C-III plus) ECM Reprogramming" general procedure.
- Take the vehicle for a 10 minute drive in order to meet the following Idle Air Volume Learn (IAVL) conditions:
 - Engine coolant temperature: 70 -100°C (158 - 212°F)
 - Battery voltage: More than 12.9V (At idle)
 - Transmission: Warmed up
 - After reprogramming is complete, you will be required to perform Idle Air Volume Learn. The above condition are required for Idle Air Volume Learn to complete.



Figure A

CAUTION:
 Connect the GR8 to the 12V battery and select ECM Power Supply Mode. If the vehicle battery voltage drops below <u>12.0V or above 15.5V</u> during reprogramming, <u>the ECM may be damaged</u>. Be sure to turn OFF all vehicle electrical loads. If a vehicle electrical load remains ON, <u>the ECM may be damaged</u>. Be sure to connect the AC Adapter. If the CONSULT PC battery voltage drops during reprogramming, the process will be interrupted and <u>the ECM may be damaged</u>. Turn off all external Bluetooth[®] devices (e.g., cell phones, printers, etc.) within range of the CONSULT PC and the plus VI. If Bluetooth[®] signal waves are within range of the CONSULT PC during reprogramming, reprogramming may be interrupted and <u>the ECM may be damaged</u>.

- 1. Connect the CONSULT PC to the vehicle to begin the reprogramming procedure.
- 2 Start C-III plus.
- 3. Wait for the plus VI to be recognized.
 - The serial number will display when the plus VI is recognized.
- 4. Select Re/programming, Configuration.

	Back	Home Print	Screen Capture Mode	Recorded Help 11.8V VI MI
	Conne	ction Status		Diagnosis Menu
Step 3:		Serial No.	Status	Diagnosis (One System)
plus VI is recognized	VI	2300727	⊳>>))) Normal Mode/Wireless connection	Diagnosis (All Systems)
	м	-	\otimes	
			No connection	Re/programming, Configuration
	S. C	Select VI/MI	1	Immobilizer
		t <mark>ion Setting</mark> Sub mode	Language Setting	Maintenance
		VDR		
ļ			Fi	gure 1

5. Follow the on-screen instructions and navigate C-III plus to the screen shown in Figure 2 on the next page.

- 6. When you get to the screen shown in Figure 2, confirm this bulletin applies as follows.
 - A. Find the ECM **Part Number** and write it on the repair order.

NOTE: This is the <u>current</u> ECM Part Number (P/N).

CONSULT-III plus Ver VIN	Vehicle :	Country : U.S.A.
Back Back Print Screen Capture	Measurement Mode Recorded Data	🚓 🏋 🗙 🖿 📃 🔀
Configuration	tion Selection Save ECU Data	717
Save ECU Data		
	e current part number as listed below to CC n by selecting suitable operation log. Opera	
File Label	******	
Operation	REPROGRAMMING	
System	ENGINE	
Part Number 6A: Cul		
Vehicle	******	
VIN	*******	
Date	11/1/201× 1:22:16 AM	Save
	Eigure 2	

Figure 2

- B. Compare the P/N you wrote down to the numbers in the **Current ECM Part Number** column in **Table A** on the next page.
 - If there is a <u>match</u>, continue with the reprogramming procedure.
 - If there is <u>not a match</u>, reprogramming is not needed.

Table A	
MODEL	CURRENT ECM PART NUMBER: 23710-
2013 Sentra	3SA0A, 3SA0B, 3SA0C, 3SA0D, 3SA0E 3SA2A, 3SA2B, 3SA2C, 3SA2D, 3SA2E 3SA3A 3SA4A, 3SA4B, 3SA4C, 3SA4D, 3SA4E 3SA5A, 3SA5B, 3SA5C, 3SA5D, 3SA5E 3SA6A, 3SA6B, 3SA6C, 3SA6D, 3SA6E 3SB0A, 3SB0B, 3SB0C, 3SB0D, 3SB0E 3SG2A, 3SG2B, 3SG2C, 3SG2D, 3SG2E 3SG3B, 3SG3C, 3SG3D, 3SG3E 3SG6A, 3SG6B, 3SG6C, 3SG6D, 3SG6E 3SG7A, 3SG7B, 3SG7C, 3SG7D, 3SG7E 3SG8A, 3SG8B, 3SG8C, 3SG8D 3SG9A, 3SG9B, 3SG9C 3SR2A, 3SR2B, 3SR2C, 3SR2D, 3SR2E 3SC3A, 3SC3B, 3SC3C, 3SC3D, 3SC3E 3SC3A, 3SC3B, 3SC3C, 3SC3D, 3SC3E 3SG3A, 3SC3B, 3SC3C, 3SC3D, 3SC3E 3SC3A, 3SC3B, 3SC3C, 3SC3D, 3SC3C 3SC3A, 3SC3B, 3SC3C, 3SC3C, 3SC3D, 3SC3C 3SC3A, 3SC3B, 3SC3C, 3SC3C 3SC3A, 3SC3C, 3SC3C 3SC3A, 3SC3C, 3SC3C 3SC3A, 3SC3C, 3SC3C 3SC
2014 Sentra	3RU6A, 3RU6B, 3RU6C 3RU7A, 3RU7B, 3RU7C 3RU8A, 3RU8B, 3RU8C, 3RU8E 3RU9A, 3RU9B, 3RU9C, 3RU9E 9AM0A, 9AM0B, 9AM0C, 9AM0D, 9AM0E 9AM1A, 9AM1B, 9AM1C, 9AM1D, 9AM1E 9AM2A, 9AM2B, 9AM2C, 9AM2D, 9AM2E 9AM3A, 9AM3B, 9AM3C, 9AM3D, 9AM3E 9AM4A, 9AM4B, 9AM4C, 9AM4D, 9AM4E 9AM5A, 9AM5B, 9AM5C, 9AM5D, 9AM5E
2015 Sentra	4AT2A, 4AT2B 4AT4A, 4AT4B, 4AT4C 4AT6A, 4AT6B, 4AT6C 4AT8A, 4AT8B, 4AT8C, 4AT8D

7. Follow the on-screen instructions to navigate C-III plus and reprogram the ECM.

NOTE:

- In some cases, more than one new P/N for reprogramming is available.
 - > If there is more than one new P/N, the screen in Figure 3 displays.
 - Select and use the reprogramming option that <u>does not</u> have the message "Caution! Use ONLY with NTBXX-XXX".
- If you get this screen and it is <u>blank</u> (no reprogramming listed), it means there is no reprogramming available for this vehicle.

CONSULT-III plus Ver.	VIN:	Vehicle :	Country : U.S.A.
Back Pri	int Screen Capture Mode	Recorded Help 11.8V	
Re/programming, Configuration	Precaution		firm Vehicle Condition 9/11
Select Program Data			
		low. rm the vehicle selection, VIN and	
System	ENGINE]	
Current Part Number	Part Number After Repr	o/programming Other Inf	ormation
xxxxxx-xxxxxxx	XXXXXX-XXXXXXX	xxxxxxxxxxxxxxxx	000000000
XXXXXX-XXXXXXX	XXXXXX-XXXXXXX	200000000000000000000000000000000000000	XXXXXXXXXXX
		010	Next
		·	

Figure 3

8. When the screen in Figure 4 displays, reprogramming is complete.

NOTE: If the screen in Figure 4 does <u>not</u> display (indicating that reprogramming did <u>not</u> complete), refer to the information on page 12.

- 9. Disconnect the battery charger from the vehicle.
- 10. Select Next.

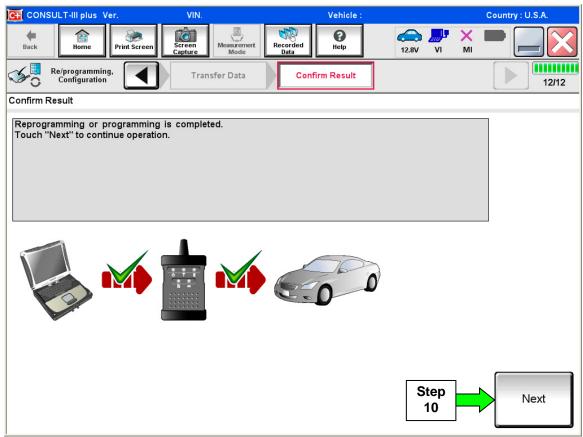


Figure 4

NOTE:

- In the next steps, starting on page 13, you will perform Throttle Valve Closed Position, Idle Air Volume Learn, Accelerator Closed Position, and DTC erase.
- These operations are required before C-III plus will provide the final reprogramming confirmation report.

Do not disconnect plus VI or shut down Consult III plus if reprogramming does not complete.

If reprogramming does <u>not</u> complete and the "!?" icon displays as shown in Figure 5:

- Check battery voltage (12.0–15.5 V).
- Ignition is ON, engine OFF.
- External Bluetooth[®] devices are OFF.
- All electrical loads are OFF.
- Select <u>retry</u> and follow the on screen instructions.
- <u>"Retry" may not go through on</u> <u>first attempt and can be</u> <u>selected more than once</u>.

CONSULT-II plus Ver	VN	Usticle		Country : Jacon
Back Bone Phint Sceen	Conterna International Interna	Nacorded Help	12.3V VI MI	
sonigistor	Transfer Data	Confirm Resul		13/13
Confirm Result				
Reprogramming or programming is no operation on this ECU. Touch "Retry" to retry reprogramming		ut you can retry reprog/	programming	
Part number after Reprog/programming		20102 2022	.	
Part number before Reprog/programming		20102-30000	—	
Vehicle		0101011		
VIN		004704010010	0.00 -	
System				
Date				Retry
Error Code				
End Code				

Figure 5

If reprogramming does <u>not</u> complete and the "X" icon displays as shown in Figure 6:

- Check battery voltage (12.0 15.5 V).
- CONSULT A/C adapter is plugged in.
- Ignition is ON, engine OFF.
- Transmission is in Park.
- All C-III plus / VI cables are securely connected.
- All C-III plus updates are installed.
- Select <u>Home</u>, and restart the reprogram procedure from the beginning.

CONSULT-IL BUS	. Ver.	VIN	Vehicle : QASHQAI		County : Japan
Bark Hone	Prist Screer	Screen Node	Recorded Help	0.7V VI M	-
Re/programi	ing.	Transfer Data	Confirm Reput		9/9
Confirm Result					
with precedure.	s needed. Confi		N/Power switch position, shi reprogramming again.	t position and etc	
Part number after Reprog/programmi	ng		20422 300001	•	
Current part numbe	BL		20422-000000	-	
Vehicle			Quanqua	-	
VIN				-	
System					
Date				-	
Information					
Error Code					Print

Figure 6

11. Follow the on-screen instructions to perform the following:

- Throttle Valve Closed Position
- Idle Air Volume Learn (IAVL)

NOTE:

- > Listed below are common conditions required for IAVL to complete.
- If IAVL does not complete within a few minutes, a condition may be out of range.
- Refer to the appropriate ESM for specific conditions required for the vehicle you are working on.
 - Engine coolant temperature: 70 -100° C (158 212°F)
 - o Battery voltage: More than 12.9V (At idle)
 - o Selector lever: P or N
 - Electric load switch: OFF (Air conditioner, headlamp, rear window defogger)
 - Steering wheel: Neutral (Straight-ahead position)
 - Vehicle speed: Stopped
 - o Transmission: Warmed up

• Accelerator Pedal Close Position Learning

• Erase DTCs

Continue to the next page.

- 12. When the entire reprogramming process is complete, the screen in Figure 7 will display.
- 13. Verify the before and after part numbers are different.
- 14. Print a copy of this screen (Figure 7) and attach it to the repair order for warranty documentation.
- 15. Select **Confirm**.

CONSULT-III plus Ver	VIN:	Vehicle :			Country : U.S.A.	
Back Back Print Screen	Screen Capture	nt Recorded Help	14.3V VI	× _{MI}	-	
Re/programming, Configuration	Erase All DTCs	Print Result / Operation Complete			18/18	
Print Result / Operation Complete						
All tasks are completed. Confirm LA In case CONSULT can NOT immedia temporally storage of this page. Tou Data Folder" on desk top, and open t	tely access to LAN ch "Screen Captur	l or printer, Screen Capture func e'', and save it. Screen capture o				
Part number after Reprog/programming	Step	23710				
Part number before Reprog/programming	13	23710				
Vehicle		******				
VIN		*****				
System		ENGINE			Print	Step 14
Date		1-1101201				14
			1/1		Confirm	Step 15

Figure 7

- 16. Close C-III plus.
- 17. Turn the ignition OFF.
- 18. Disconnect the plus VI from the vehicle.

PARTS INFORMATION

DESCRIPTION	PART NUMBER	QUANTITY
PCV Valve (Black Color)	11810-6N202	1 (a)
GASKET-ADAPTER (ETC gasket)	16175-JA00A	1
Nissan Genuine Low VOC Non-Chlorinated Carburetor Cleaner	999MP-A3001P	(b) (c)

(a) If needed. See page 2, Inspect / Replace PCV Valve (2013- 2014 Sentra Only).

- (b) For warranty repairs, Nissan Genuine Low VOC Non-Chlorinated Carburetor Cleaner <u>must</u> be used. For non-warranty repairs, Nissan Genuine Low VOC Non-Chlorinated Carburetor Cleaner is recommended, but an equivalent "carburetor" cleaner may be used.
- (c) Nissan Genuine Low VOC Non-Chlorinated Carburetor Cleaner can be ordered through the Nissan Maintenance Advantage program: Phone: 877-NIS-NMA1 (877-647-6621) or Website: Order via link on dealer portal <u>www.NNAnet.com</u> and click on the "Maintenance Advantage" link.

CLAIMS INFORMATION

For 2013 and 2014 models only IF PCV Valve Is Orange

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

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
RPL PCV Valve	11810-6N202	AR32AA	HD	32	(1)

(1) Reference the current Nissan Warranty Flat Rate Manual and use the indicated FRT.

<u>And</u>

On the same repair line:

DESCRIPTION	OP CODE	SYM	DIA	FRT
Clean Electronic Throttle Chamber off Vehicle	DX48AA	ZE	32	0.5

EXPENSE CODE

EXPENSE CODE	DESCRIPTION	MAX AMOUNT
041	Nissan Genuine Low VOC Non-Chlorinated Carburetor Cleaner	\$1.75

<u>And</u>

Only if needed for 2013-2014

On the same repair line if the ECM is reprogrammed:

DESCRIPTION	OP CODE	SYM	DIA	FRT
Reprogram ECM	DE97AA	ZE	32	(1) (2)

(1) Reference the current Nissan Warranty Flat Rate Manual and use the indicated FRT.

(2) FRT allows adequate time to access DTC codes and reprogram ECM. No other diagnostic procedures subsequently required. Do NOT claim any Diagnostic Op Codes with this claim.

For 2013 and 2014 models only IF PCV Valve is Black, and reprogramming is needed

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

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Reprogram ECM	(1)	DE97AA	ZE	32	(2) (3)

(1) Reference FAST and use the ECM part number (23710-*****) as the PFP.

(2) Reference the current Nissan Warranty Flat Rate Manual and use the indicated FRT.

(3) FRT allows adequate time to access DTC codes and reprogram ECM. No other diagnostic procedures subsequently required. Do NOT claim any Diagnostic Op Codes with this claim.

<u>And</u>

On the same repair line:

DESCRIPTION	OP CODE	SYM	DIA	FRT
Clean Electronic Throttle Chamber off Vehicle	DX48AA	ZE	32	0.5

EXPENSE CODE

EXPENSE CODE	DESCRIPTION	MAX AMOUNT
041	Nissan Genuine Low VOC	\$1.75
511	Non-Chlorinated Carburetor Cleaner	\$ 1170

<u>OR</u>

For 2015 Models, if reprogramming is needed

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

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Reprogram ECM	(1)	DE97AA	ZE	32	(2) (3)

(1) Reference FAST and use the ECM part number (23710-*****) as the PFP.

(2) Reference the current Nissan Warranty Flat Rate Manual and use the indicated FRT.

(3) FRT allows adequate time to access DTC codes and reprogram ECM. No other diagnostic procedures subsequently required. Do NOT claim any Diagnostic Op Codes with this claim.

And

On the same repair line:

DESCRIPTION	OP CODE	SYM	DIA	FRT
Clean Electronic Throttle Chamber off Vehicle	DX48AA	ZE	32	0.5

EXPENSE CODE

EXPENSE CODE	DESCRIPTION	MAX AMOUNT
041	Nissan Genuine Low VOC Non-Chlorinated Carburetor Cleaner	\$1.75

If ONLY the throttle chamber requires cleaning (all applied models).

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
R&R EFI Throttle Chamber (for cleaning)	(1)	DE22AA	ZE	32	(2)

(1) Refer to the electronic parts catalog (FAST) and use the Electronic Throttle Control Chamber assembly part number as the Primary Failed Part (PFP).

(2) Reference the current Nissan Warranty Flat Rate Manual and use the indicated flat rate time.

EXPENSE CODE

EXPENSE CODE	DESCRIPTION	MAX AMOUNT
041	Nissan Genuine Low VOC Non-Chlorinated Carburetor Cleaner	\$1.75