





# VOLUNTARY EMISSION SERVICE CAMPAIGN 2013-2016 SENTRA; ECM REPROGRAM AND OXYGEN SENSOR VOLTAGE INSPECTION

CAMPAIGN ID #:P1A25APPLIED VEHICLES:2013-2016 Sentra (B17) - SULEV only

Check Service COMM or Dealer Business Systems (DBS) National Service History to confirm campaign eligibility.

NOTE: This bulletin only applies to California specification SULEV vehicles.

### INTRODUCTION

Nissan is conducting this voluntary emission service campaign, on certain specific model year 2013-2016 Sentra vehicles, to reprogram the ECM (if applicable), and then inspect the oxygen (O2) sensor voltage. This service will be performed at no charge to the customer for parts or labor.

## **IDENTIFICATION NUMBER**

Nissan has assigned identification number P1A25 to this campaign. This number must appear on all communication and documentation of any nature dealing with this campaign.

## DEALER RESPONSIBILITY

Dealers are to repair vehicles falling within range of this campaign that enter the service department. This includes vehicles purchased from private parties, vehicles presented by transient (tourist) owners, and vehicles in a dealer's inventory.

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.

#### **REPAIR OVERVIEW**



## SERVICE PROCEDURE

**IMPORTANT:** Check and repair any ENGINE DTCs prior to reprogramming the ECM. DTCs stored prior to performing this ECM reprogram are <u>not</u> covered under this campaign.

## Reprogram the ECM

- 1. Using C-III plus, confirm the current ECM part number and write it on the repair order.
  - If it matches one of the part numbers in **Table A**, continue to step 2 on page 4 to reprogram the ECM.
  - If there is not a match, ECM reprogramming is not required. Skip to step 4 on page 5 for O2 sensor voltage inspection.

#### Table A

MODEL YEAR	CURRENT ECM PART NUMBER: 23710-
2013	3RH2A, 3RH2B, 3RH2D, 3RH2E 3RH3A, 3RH3B, 3RH3D, 3RH3E 3RH6A, 3RH6B 3RH7A, 3RH7B
2014	3RU8B, 3RU8C, 3RU8E 3RU9B, 3RU9C, 3RU9E 3SR6A, 3SR6B, 3SR6C 3SR7A, 3SR7B, 3SR7C
2015	4AT8A, 4AT8B, 4AT8C, 4AT8D, 4AT8E 4AT9A, 4AT9B
2016	3RJ6A, 3RJ7A 4AF4A, 4AF4B, 4AF4D, 4AF4E 4AF5A, 4AF5B, 4AF5D, 4AF5E



Perform the following before starting the reprogramming procedure to prevent damage to the control unit.

- Connect the AC Adapter to the CONSULT PC.
- Connect the CONSULT PC to the Internet via Wi-Fi or a network cable.
- Ensure ASIST on the CONSULT PC has been synchronized (updated) to the current date and all C-III plus software updates (if any) have been installed.
- Turn OFF all external Bluetooth<sup>®</sup> devices (e.g., cell phones, printers, etc.) within range of the CONSULT PC and the VI. If Bluetooth<sup>®</sup> signal waves are within range of the CONSULT PC or VI during reprogramming, the reprogramming may be interrupted.
- Turn OFF all vehicle electrical loads.
- Turn ON the hazard warning lamps.
- Connect a battery maintainer or smart charger, set to reflash mode or a similar setting, to ensure the battery voltage stays between 12.0 V and 15.5 V.

#### HINT:

- If you are not familiar with the reprogramming procedure, <u>click here</u>. 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 Learning conditions:
  - Engine coolant temperature: 70 100°C (158 212°F)
  - o Battery voltage: More than 12.9 V (at idle)
  - o Transmission: Warmed up
- When reprogramming is complete, you may be required to perform:
  - o Accelerator Pedal Released Position Learning
  - o Throttle Valve Closed Position Learning
  - o Idle Air Volume Learning
  - o DTC Erase
- 2. Reprogram the ECM.
- 3. After completing **Erase ALL DTCs**, print a copy of the C-III plus screen showing the before and after part numbers of the control unit and attach it to the repair order.

## Inspect the Rear O2 Sensor Voltage

**NOTE:** Make sure the engine is OFF and let the vehicle cool down for 15 minutes before proceeding.

Back	Home	tt Screen Capture Mode Record			
Conne	ction Status		Diagnosis Menu		
	Serial No.	Status	Diagnosis (One System)		
VI	2317687	ငား စ))) Normal Mode/Wireless connection	Diagnosis (All Systems)		
МІ	•	No connection	Re/programming Configuration		
800	Select VI/M	II			
	Application Setting           Sub mode         Image Setting   Maintenance				
VDR					
	Figure 1				

4. Select **Diagnosis (All Systems)**.

5. Select ENGINE.



Figure 2

#### 6. Select Data Monitor.



Figure 3

#### 7. Select Clear Monitor Item.



Figure 4

8. Locate and select HO2S2 (B1) from the data monitor list, and then select START.



Figure 5

- 9. Check the Rear O2 Sensor (**HO2S2 (B1)**) voltage in the data monitor screen (Figure 6).
  - If the HO2S2 (B1) voltage is 0.13 V or above, no further action is needed. The inspection result is OK and the SERVICE PROCEDURE is complete, skip to CLAIMS INFORMATION on the last page.
  - If the HO2S2 (B1) voltage is less than 0.13 V, the rear O2 sensor has a short to ground condition and the inspection result is NG.
    - a. Print the data monitor screen and attach it to the repair order.
    - b. Diagnose and repair the Rear O2 Sensor short to ground condition by following the diagnosis steps outlined in the ESM for DTC P0137 (HO2S2).
      - Refer to the ESM: ENGINE > ENGINE CONTROL SYSTEM > MRA8DE >DTC/CIRCUIT DIAGNOSIS > P0137 HO2S2 > Diagnosis Procedure

**NOTE:** Follow the diagnosis and repair procedure even if DTC P0137 is not present.

c. Proceed to step 10 to perform the drive pattern to set the System Readiness Test (SRT) status.

e Back	Home	Print Screen	Screen Capture	Measurement Mode	Recorded Data	() Help	ERT	(11.8V	Yil vi	Х.		
Data Mon	itor	Sort by selec	tion	Ascending	order	Line	Graph			Single	List	▼
	ENGINE	HO2S2 (B1	1)						0.28	/		
	ſ	Explanation	1	Trigger	Info					P	ecord	
	L	Explanation	]	ingger	inio.					ĸ	ecord	

Figure 6

## Setting the System Readiness Test (SRT) Status

- 10. Set the SRT's by performing the SRT status drive pattern outlined in the ESM.
  - Refer to the ESM: B: ENGINE > EC Engine Control System > Table of Contents > MRA8DE > BASIC INSPECTION > HOW TO SET SRT CODE > Work Procedure

# **Check SRT Status**

11. Select Diagnosis (All Systems).

Hack	Home	Screen Capture Mode Re	Register of the second
Conne	ction Status		Diagnosis Menu
	Serial No.	Status	Diagnosis (One System)
VI	2317687	►>>>)))) Normal Mode/Wireless connection	Diagnosis (All Systems)
МІ	-	No connection	Re/programming, Configuration
Select VI/MI			Immobilizer
	tion Setting Sub mode	Language Setting	Maintenance
VDR			

Figure 7

12. Select **SRT & P-DTC**.

Diagnosis (All Systems)	Select	: Vehicle Diagnosis (All Systems)	
All DTC	CAN Diag	CAN DIAG SUPPORT MNTR	
Result		Detailed Information	
ENGINE	NO DTC		
ABS	NO DTC		
METER/M&A	NO DTC		
всм	NO DTC		
AIR BAG	NO DTC		Print
TRANSMISSION	NO DTC		For Customer
EPS/DAST 3	NO DTC		Save
1/3		0/0	ERASE

Figure 8

13. Select ENGINE and ENG SPEED, and then select START.

Back Home Print	t Screen Mode	Norded Help ALL CALL CALL OF THE CALL OF T	× = _ X	
Diagnosis (All Systems)	Select Vehicle Confirm Vehi	cle Diagnosis (All Systems)		
	CAN Diag	TR SRT & P-DTC		
System	ENGINE			
ENGINE	Monitor Menu DTC	& SRT CONFIRMATION		
ABS	COOLANT TEMP/S	A/F ALPHA-B1		
BCM	VHCL SPEED SE	INT/V SOL(B1)		
AIR BAG	BATTERY VOLT	A/F S1 HTR(B1)		
ICC/ADAS	INT/A TEMP SE	EXH/V TIM B1		
HVAC	IGN TIMING	ENG SPEED		
TRANSMISSION	H02S2 (B1)	INJ PULSE-B1		
1/3	1/8 START			
Figure 9				

- 14. Check the SRT Status for HO2S and CATALYST.
  - If the **HO2S** and **CATALYST** status is "CMPLT", proceed to step 15 on page 11 to check for Engine DTC's.
  - If the **HO2S** or **CATALYST** status is "INCMP", go back to step 10 on page 8 to perform the SRT status drive pattern again.

Back Home Print Screen	Screen Capture	ERT	11.6V VI MI		. 🗙
Diagnosis (All Select	Vehicle Confirm Vehicle Dia	gnosis (All Systems)			
All DTC OCAN Diag		T & P-DTC			
SRT Status	Perma	System	Monitor Item	Value	Unit
Check following status for each Con	dition.	ENGINE	ENG SPEED	0	rpm
		ENGINE	B/FUEL SCHDL	15.2 (	ms
Condition	Status				
EGR/VVT SYSTEM	INCMP				
HO2S HTR	CMPLT				
HO2S	INCMP				
EVAP SYSTEM	INCMP				
CATALYST INCMP					
	1/2			1/1	

Figure 10

## Check for DTC's

15. When the HO2S and CATALYST status is "CMPLT", select All DTC.

Back Home Print Screen	Creen Capture Mode Recorded Data	ERT	12.2V VI MI			
Diagnosis (All Select	Diagnosis (All Systems) Select Vehicle Confirm Vehicle Systems)					
All DTC Diag	CAN DIAG SUPPORT MNTR	& P-DTC				
SRT Status	Perma	System	Monitor Item	Value	Unit	
Check following status for each Con	dition.	ENGINE	ENG SPEED	0	rpm	
		ENGINE	B/FUEL SCHDL	14.2	ms	
Condition	Status					
EGR/VVT SYSTEM	CMPLT					
HO2S HTR	CMPLT					
HO2S	CMPLT					
EVAP SYSTEM	CMPLT					
CATALYST CMPLT						
	1/2			1/1		

Figure 11

- 16. Check for DTCs.
  - If there are stored DTCs (Current, Pending, or Past) that are listed in **Table B** on the next page:
    - a. Print all the DTCs and attach the printout to the repair order.
    - b. Perform diagnosis and repair of the stored DTCs per the ESM.
    - c. Erase the DTCs and then re-perform steps 10 16 on pages 8 11 after repairs are completed.
    - d. Send an email to FQA\_Inspection\_Support@nissan-usa.com for claims coding for the short to ground diagnosis and repair performed in step 9 on page 8. Please allow 48 business hours for a response.
      - > Be sure to include the following items in the email:
        - Email Subject Line: P1A25 ECM REPROGRAM AND OXYGEN SENSOR VOLTAGE INSPECTION
        - Dealer Name:
        - Dealer Code:
        - VIN:
        - Contact Person Name:
        - Contact Person Email:
        - H02S Inspection Result:
        - Repairs Performed:
  - Diagnosis and repair of stored DTCs (Current, Pending, or Past) <u>not</u> listed in **Table B** on the next page is not covered by this campaign.

## Table B

Applicable DTC List				
P014C	P014D	P015A	P015B	
P0130	P0137	P0138	P0139	
P0037	P0038	P2096	P2097	
P0420				

# **CLAIMS INFORMATION**

# Submit a "CM" line claim using the following claims coding:

CAMPAIGN ("CM") ID	DESCRIPTION	OP CODE	FRT
DIADE	Reprogram ECM and Perform O2 Sensor Voltage Check (OK Condition)	P1A250	0.5
F TAZO	Reprogram Not Needed and Perform O2 Sensor Voltage Check (OK Condition)	P1A251	0.3

## AMENDMENT HISTORY

PUBLISHED DATE	REFERENCE	DESCRIPTION
February 9, 2022	NTB22-006	Original bulletin published