

Classification:

EM15-001

Reference:

Date: March 17, 2015

# 2013-2014 SENTRA; ENGINE OVER TEMP, DTC P1217, AND / OR A/C NOT COLD

NTB15-020

**APPLIED VEHICLE:** 2013-2014 Sentra (B17)

### **IF YOU CONFIRM:**

- The engine has an over temp condition.
- The radiator fan does not operate. •
- The 40A fusible link for the fan shroud and motor assembly (cooling fan or radiator fan) is open or has no continuity.

### NOTE:

- The MIL may be ON with DTC P1217 (ENG OVER TEMP) stored in the ECM.
- The customer may state the A/C does not produce cold air as defined in the Electronic Service Manual.

# ACTION:

- 1. Compare the vehicle's current ECM part number to those listed in Table A (see page 6).
- 2. If the ECM part number matches one listed in **Table A**, reprogram the ECM.
- 3. Replace the 40A fusible link.
- 4. Replace the fan shroud and motor assembly (cooling fan/radiator fan).
- 5. Inspect the engine room harness, replace as necessary.
- 6. Verify cooling system operation and related engine condition.

**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 entire **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

- 1. Replace the 40A fusible link.
  - Refer to the Electronic Service Manual (ESM), section **PG-Power Supply, Ground** & Circuit Elements, for 40A fusible link location.
- 2. Replace the radiator fan.
  - Refer to the ESM, section **CO-Engine Cooling System**, for radiator fan (cooling fan) removal and installation.
- 3. Inspect the engine room harness going to the radiator fan for an over temp condition.
  - Replace the engine room harness as needed.
- 4. Top off the cooling system.
  - Refer to the ESM, section **CO-Engine Cooling System**, for filling the cooling system.
- 5. Verify the radiator fan cycles on and off with the engine idling and the radiator fan comes on when the A/C is turned ON.
- 6. Verify the engine is operating normally (for example, the head gasket is sealing and not leaking).
  - Refer to the appropriate section(s) of the ESM.

Go to the next page.

### ECM Part Number Check / Reprogramming

### 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) 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



Figure A

• After reprogramming is complete, you will be required to perform Throttle Valve Closed Position, Idle Air Volume Learn, Accelerator Closed Position, and DTC erase.

### **CAUTION:**

- Connect the GR8 to the vehicle 12 volt battery and set to ECM power supply mode. If the vehicle battery voltage drops below 12.0V or rises above 13.5V during reprogramming, the ECM may be damaged.
- 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 the ECM may be damaged.
- 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 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. Open C-III plus.
- 3. Wait for the plus VI to be recognized.
  - Serial number will display when the plus VI is recognized.
- 4. Select Re/programming, Configuration.



5. Follow the on-screen instructions and navigate the 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.

🚗 ۳ **P** Help × 920 Screen 11.8V VI м ¥0 Re/programming, Configuration Operation Selection Save ECU Data 717 Save ECU Data Touch "Save" to save operation log and the current part number as listed below to CONSULT Operation log helps to restart next operation by selecting suitable operation log. Operation log is erased after operation has completely finished. File Label YN EXXXXX CNS KOOXX REPROGRAMMING Operation 6A: Current ECM P/N ENGINE System Part Number 23710-**1000** Vehicle VIN JUM EX KAPA KIMB 100 X40 Date 11/1/2011 1:22:16 AM Save

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



- 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>, the ECM needs to be reprogrammed. Continue with the reprogramming procedure.
  - If there is <u>not a match</u>, ECM reprogramming <u>does not apply</u>. Repairs are complete.

### Table A

Model	Current ECM Part Number: 23710 -			
	3SA0A, 3SA0B, 3SA0C, 3SA0D, 3SA0E			
	3SA2A, 3SA2B, 3SA2C, 3SA2D, 3SA2E			
	3SA4A, 3SA4B, 3SA4C, 3SA4D, 3SA4E			
	3SA5A, 3SA5B, 3SA5C, 3SA5D, 3SA5E			
	3SA6A, 3SA6B, 3SA6C, 3SA6D, 3SA6E			
2013 Sentra	3SB0A, 3SB0B, 3SB0C, 3SB0D			
	3SG2A, 3SG2B, 3SG2C, 3SG2D			
	3SG3A, 3SG3B, 3SG3C, 3SG3D, 3SG3E			
	3SG6A			
	3SG7A			
	3SR2A			
	3SR3A			
	9AM0A, 9AM0B			
	9AM1A, 9AM1B			
2014 Sontra	9AM2A, 9AM2B			
2014 Sentra	9AM3A, 9AM3B			
	9AM4A, 9AM4B			
	9AM5A, 9AM5B			

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.
  - ▶ In this case, 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.

Back Home Print Back Re/programming, Configuration	At Screen Screen Mode	Recorded Data	Confirm Vehicle Condition	9/11
Select Program Data Touch and select the rep In case no reprog/program reprog/programming data	orog/programming data listed be mming data is listed below, confi in CONSULT.	ilow. irm the vehicle selection, V	/IN and	
System Current Part Number	ENGINE Part Number After Rep	ro/programming	Other Information	
XXXXX-XXXXX XXXXX-XXXXX	XXXXX-XXXXX XXXXX-XXXXX	XXXXXXXXXXX XXXXXXXXXXX	*****	
			0/0	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 (reprogramming does <u>not</u> complete), refer to the information on the next page.

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





### NOTE:

- In the next steps (page 10), 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 C-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<sup>®</sup> devices are OFF.
- All electrical loads are OFF.
- Select <u>retry</u> and follow the on screen instructions.
- <u>"Retry" may not go through</u> on first attempt and can be selected more than once.

	VN	<b>WETERS</b>	Loumpy : Jacon
Back Home Print Screen	Schean Mode	sortbed Data	12.3V VI MI
sonigistion	Transfer Data	Corfirm Resul	1313
Confirm Result			
Reprogramming or programming is no operation on this ECU. Touch "Retry" to retry reprogramming	it completed propertly, but or programming.	t you can retry reprog/pr	
Part number after Reproc/programming		12848E-100000	
Part number before Reprog/programming		128188-100000	
Vehicle		IQAGIIQAI	
Vehicle VIN		SUNFORUTOUTION	0
Vehicle VIN System		I IQAGNICIAI SINIPCALIPOID 1000	
Vehicle VIN System Dote			IIC Rotry
Vehicle VIN System Date Error Code		E BAGRADH Sinforthornoo E E Bagrad Singradhi Bagar	IC ID Roty

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 Print Scre	HE DESIGN	Rectriced Help		🛛
Re/programiag.	Transfer Data	Confirm Result		9/9
Confirm Result				
Reprogramming is not complet -Print this screen as needed. C with procedure. -Restart CONSULT with discon-	ed property. onfirm CONSULT version, K necting VI onse, and start th	3N/Power switch position, shift j e reprogramming again.	cosition and etc	
Part number after Reprog/programming		26462.00000		
Current part number		<b>21402</b> 000000		
Vehicle		CARHON .		
VIN				
System				
Date		20/00/2010 10:303/00		
Information				
Error Code				Print
X				

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 Electronic Service Manual (ESM) for specific conditions required for the vehicle you are working on.
  - Engine coolant temperature: 70 -100° C (158 212°F)
  - Battery voltage: More than 12.9V (At idle)
  - Shift selector: 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.

Back Fine Print Screen Capture	Messurement Mode Messurement Mode Messurement	× 🖿 📃 🔀				
Re/programming, Configuration	se All DTCs Print Result / Operation Complete	18/18				
Print Result / Operation Complete						
All tasks are completed. Confirm LAN access, touch "Print" to print out this page. In case CONSULT can NOT immediately access to LAN or printer, Screen Capture function is available for temporally storage of this page. Touch "Screen Capture", and save it. Screen capture data is in "CIII plus Data Folder" on desk top, and open the folder named "ScreenImages".						
Part number after Reprog/programming	23710- <b>XEX2E</b>					
Part number before Reprog/programming	23710- <b>XEXXE</b>					
Vehicle	2343002K					
VIN	XMXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX					
System	ENGINE Step	Print				
Date	×10XX28***2×10X21×40N					
	1/1 Step 1/1	Confirm				

Figure 7

### 16. Close C-III plus.

- 17. Turn the ignition OFF.
- 18. Disconnect the plus VI from the vehicle.
- 19. Make sure the vehicle operates correctly and the MIL is OFF.
  - If the MIL comes ON, go back to ASIST for further diagnostic information.
  - Diagnosis and repairs beyond this bulletin (ECM reprogramming, radiator fan replacement, etc.) are not covered by this bulletin.

### PARTS INFORMATION

DESCRIPTION	PART NUMBER	QUANTITY
MOTOR & FAN ASSY-W/ SHROUD	21481-3SH5A	1
CONNECTOR ASSY-FUSIBLE LINK	24370-C9922	1
Nissan Genuine Blue Long Life Antifreeze/Coolant	999MP-L25500P	**
Engine room harness	24012-xxxxx *	1 ***

\* Use FAST or your Electronic Parts Catalog to obtain the correct part number.

\*\* Up to one (1) gallon. Nissan Genuine Blue Long Life Antifreeze/Coolant is available 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 "Maintenance Advantage" link.

\*\*\*As needed. The part must be verified as needing replacement.

### **CLAIMS INFORMATION**

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

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Replace cooling fan		CC20AA			
Replace fusible link	23703-3SA1A	RA10AA	ZE	32	(1)
Reprogram ECM		DE97AA			

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

### AND - IF NEEDED - on the same repair line

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

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Replace engine room harness	23703-3SA1A	RA16AA	ZE	32	(1)

(1) This is a <u>Straight Time</u> operation code claim only for actual repair time used based on time stamps for this portion of the repair only.