SERVICE BULLETIN

Classification:	Reference:	Date:
EC05-016a	NTB06-039a	May 17, 2006

2004 – 2005 ALTIMA; MIL ON P1273 (QR25 ENGINE) MAY BE CAUSED BY THE REAR O2 SENSOR

This bulletin has been amended. The Claims Information has been updated.
Discard all previous versions of this bulletin.

APPLIED VEHICLE: 2004 - 2005 Altima (L31) with QR25 (4 cyl) engine only

IF YOU CONFIRM

DTC code P1273, A/F SENSOR1 (B1), is stored,

ACTIONS

1. Using CONSULT-II, print the Freeze Frame (FF) data and clear the ECM Self Learn.
2. Make sure the engine does not have any exhaust leaks, intake leaks, or leaks at the PCV hose.
3. Check for proper operation of the Air/Fuel (A/F) sensor per the Service Manual (ESM).
4. If the A/F sensor is operating correctly and there are no intake or exhaust leaks, replace the Rear O2 sensor.
5. Clear the ECM Self Learn and make sure DTC is erased.

NOTE: The Rear O2 sensor is used for some OBD-II diagnostics of the front A/F sensor. If the Rear O2 sensor is malfunctioning, it can cause a DTC for the front A/F sensor.

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 entire Service Procedure (starting on page 3) as it contains information that is essential to successfully completing this repair.

PARTS INFORMATION

DESCRIPTION	PART #	QUANTITY
Oxygen Sensor-Rear	226A1-AR210	1, if needed
A/F Sensor	22693-8U300	1, if needed

CLAIMS INFORMATION

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

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
RPL Rear O2 Sensor	(1)	DE49AA	HD	32	(2)
Diagnosis – DTC P1273		EJ89AA			(2)

(1) Reference the Parts Information table and use the indicated Rear O2 sensor P/N as the PFP.
(2) Reference the current Nissan Warranty Flat Rate Manual and use the indicated FRT.

OR:

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
RPL Air Fuel Sensor	(3)	DE53AA	HD	32	(4)
Diagnosis – DTC P1273		EJ89AA			(4)

(3) Reference the Parts Information table and use the indicated A/F Sensor P/N as the PFP.
(4) Reference the current Nissan Warranty Flat Rate Manual and use the indicated FRT.

And, if necessary (for RPL Air Fuel Sensor Only, see Step 6 in the Service Procedure):

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Reprogram ECM per TSB	(5)	DE98AA (6)	HD	32	0.8 hrs (6)

(5) Reference the final CONSULT-II print-out and use the indicated new ECM P/N as the PFP.
(6) FRT allows adequate time to access DTCs, reprogram ECM and perform the A/F Sensor function test.

NOTE: Diagnosis time may only be used once per claim, regardless of the repair performed.

SERVICE PROCEDURE

1. With CONSULT-II ON, print the Freeze Frame data as follows:

   START(Nissan) **>> ENGINE >> Self-DIAG Results >> F.F. Data >> PRINT**

2. Attach this printout to the Repair Order.

   - Figure 1 is an example of the F.F. Data printout.
   - The Freeze Frame data that you've printed contains the ECM Part Number (P/N).
   - The ECM part number may be used to see if reprogramming is needed later in the Service Procedure.

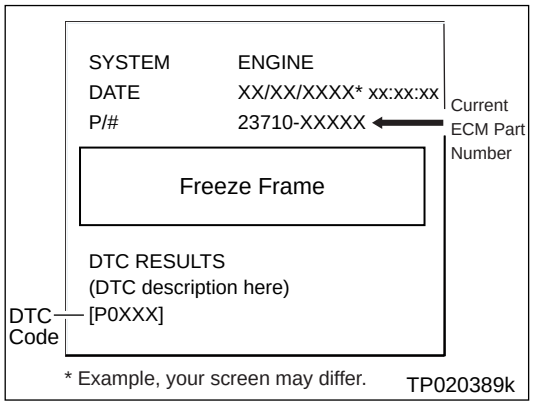

Figure 1

3. Clear the ECM Self Learn using CONSULT-II in Work Support mode.

4. Check the exhaust system for leaks:

   a. Lift the car in the air with the engine running at idle.

   b. Carefully inspect the exhaust system for leaks between the engine and just after the Rear O2 sensor.

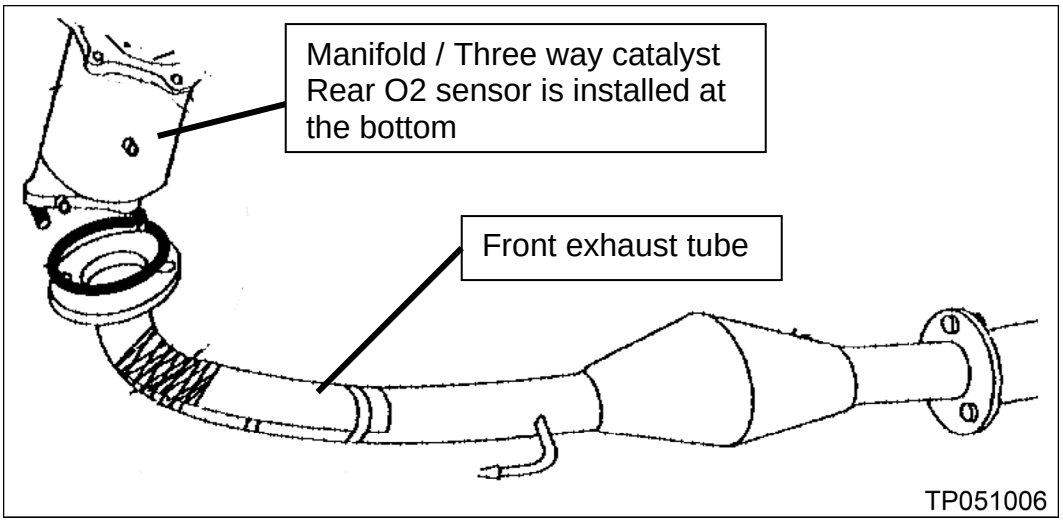

Figure 2

   c. Inspect carefully: Pay special attention to the welded parts of the front tube and the sealed joints between the exhaust manifold and the front tube.

      - Leaks are easier to find if you temporarily restrict the tailpipe to increase exhaust backpressure.

   d. If there are no exhaust leaks, go to step 5 on the next page.

   e. If you find an exhaust leak, the leak is the likely cause of DTC P1273.

      - **So this bulletin does not apply.**
      - Repair the exhaust leak as needed using repair information from the Service Manual and ASIST.
      - Make sure to clear Self Learn and erase DTC after exhaust leak is repaired.

5. Check for intake leaks, and leaks at the PCV hose.

   a. Carefully inspect the air intake system and PCV hose for leaks.

   b. Refer to the Service Manual as needed.

   d. If there are no intake leaks, go to step 6.

   e. If you find an intake leak, the leak is the likely cause of DTC P1273.

   - **So this bulletin does not apply**.
   - Repair the intake leak as needed using repair information from the Service Manual and ASIST.
   - Make sure to clear Self Learn and erase DTC after the intake leak is repaired.

6. Check the A/F Sensor operation per the Service Manual (ESM).

   a. If the A/F Sensor checks OK, go to step 7.

   b. If the A/F Sensor checks NG:

   - Replace the sensor,

     then
   - Go to the next page to see if ECM Reprogramming is needed.

   NOTE: DO NOT reprogram unless the A/F Sensor checks N/G.

7. If the A/F sensor operation is OK and there are no intake or exhaust leaks, replace the **Rear O2 sensor**.

8. Clear the ECM Self Learn again (using CONSULT-II in Work Support mode) and make sure DTC P1273 is erased.

CHECK TO SEE IF REPROGRAMMING IS NEEDED

Compare your vehicle's ECM P/N to those shown under **Current ECM P/N** in **Chart A**, below:

- ECM Part Number is on the printout from Step 1 (Figure 1) on page 3;

Chart A

VEHICLE	ENGINE	EMISSION	VEHICLE CONFIGURATION	Current ECM P/N 23710-
2004 Altima	QR25 (4 cylinder)	CAL SULEV*	M/T	9J365
			M/T, ASCD	9J370
			A/T	9J320
			A/T, ASCD	9J360
		50 States (ULEV)**	M/T	9J310, -9J311
			M/T, ASCD	9J315, -9J316
			A/T	9J300, -9J301
			A/T, ASCD	9J305, -9J306
	VQ35 (V6) This TSB does not apply.			
2005 Altima	QR25 (4 cylinder)	50-state	M/T	9J510, -9J511
			M/T, ASCD	9J515, -9J516
			A/T	9J500, -9J501
			A/T, ASCD	9J505 -9J506
		CAL SULEV*	M/T	9J565, -9J566
			M/T, ASCD	9J570, -9J571
			A/T	9J520, -9J521
			A/T, ASCD	9J560, -9J561
	VQ35 (V6) This TSB does not apply.			

* California Super Ultra Low Emission Vehicle (CAL SULEV)
** Ultra Low Emission Vehicles (ULEV)

NOTE: States that have traditionally required California emission vehicles may have both 50-state and CAL SULEV vehicles. The easiest way to identify the vehicle's emission is with the current ECM P/N and referring to chart-A above.

A. If your vehicle's ECM P/N **matches** a P/N in the chart above:

- Perform **ECM Reprogramming** (on the next page).

B. If your vehicle's ECM P/N **does not match** a P/N in the chart above:

- Reprogramming **is not** needed.

ECM REPROGRAMMING

Overview

- There are 4 basic steps (tasks) for ECM Reprogramming.

Step 1: Download (transfer) reprogramming data from ASIST into CONSULT-II.

Step 2: “Preparation” steps before reprogramming ECM.

Step 3: Reprogram the ECM.

Step 4: “Wrap-up” after ECM reprogramming is finished.

NOTE:

- **If you’re <u>not</u> familiar with the latest ECM reprogramming procedures,** click *here*.

  This will link you to the "ECM Reprogramming For Nissan Vehicles" general procedure.

- For those familiar with ECM Reprogramming, please review the following steps and use them as a Quick Reference for ECM reprogramming.

Step 1: Download (Transfer) Reprogramming Data From ASIST Into CONSULT-II

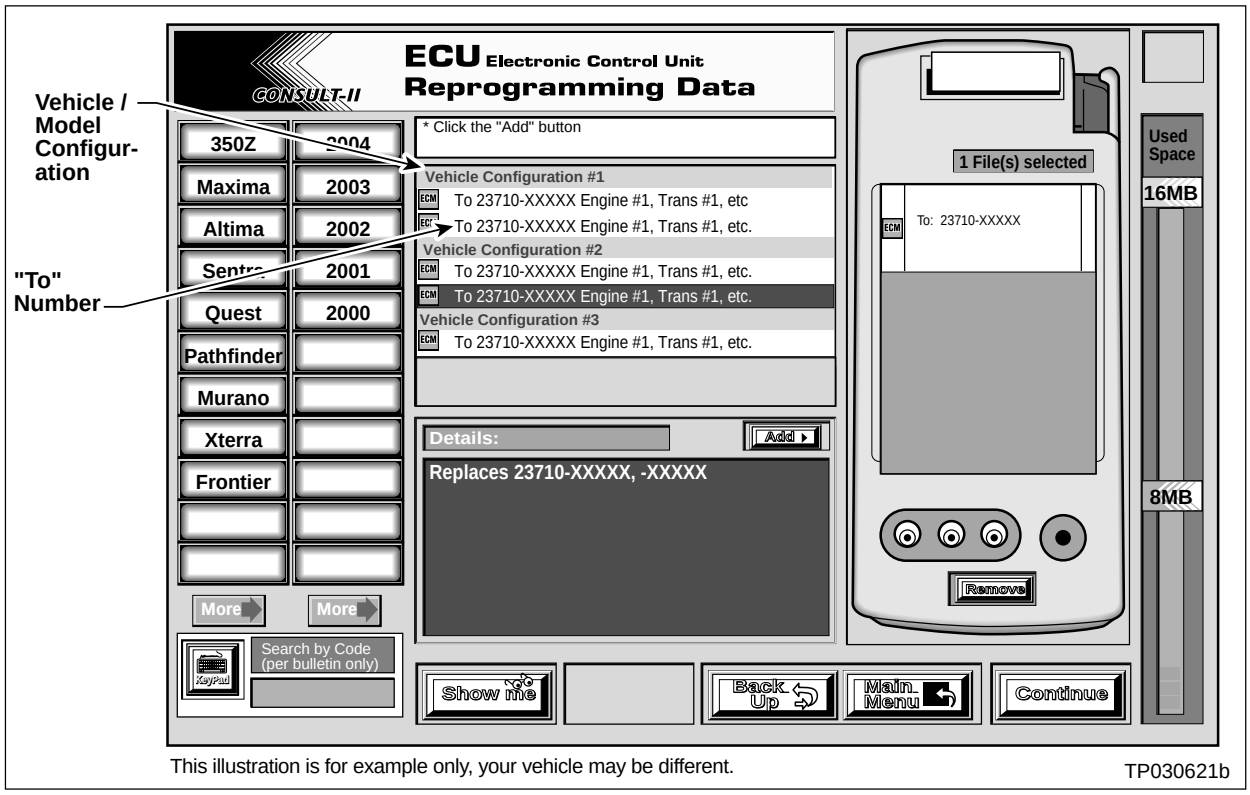

Figure A

1. Select vehicle model and model year (Example: Altima, 2004).

2. Select the correct reprogramming data:
   a. Locate the specific “Model Configuration” (Example: QR25, ASCD).

      NOTE: Model Configuration may include items such as engine type, transmission type, and vehicle options such as ASCD, TCS, ABS etc.

   b. Select (click on) the “To” number.

      NOTE: The “To” number will read: 23710-XXXXX.

3. Click on the “Add” button.
   - This will add the data you selected to the “File(s) Selected” list.

4. Write the “To” number on the Repair Order.

5. Click on “Continue” and follow directions to perform “data transfer” (download) from ASIST into CONSULT-II.

Step 2: Preparation Steps Before Reprogramming ECM

1. Connect a battery charger to the vehicle's battery.

    - Set the charger to a low charge rate (trickle charge).

CAUTION: For step 2 and step 3 on the next page, DO NOT connect the CONSULT-II A/C Power Supply (see Figure B).

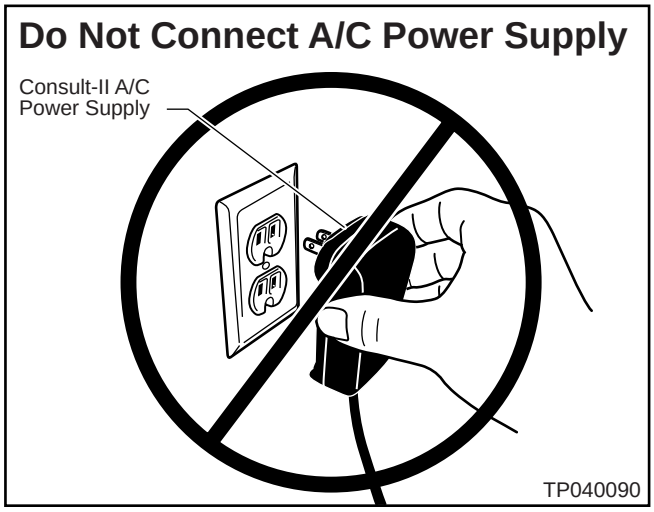

Figure B

2. Press **SUB MODE** (see Figure C) then:

    a. From the listed items, find and select **BATTERY CHARGE**

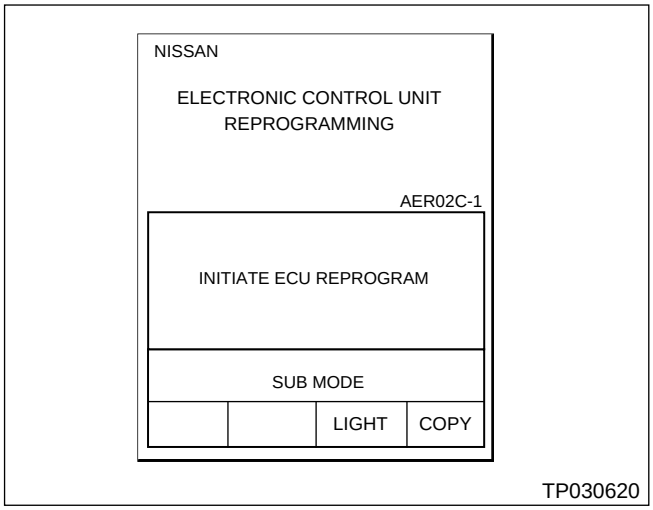

Figure C

3. Check the CONSULT-II's "Charger Input" reading (see Figure D).

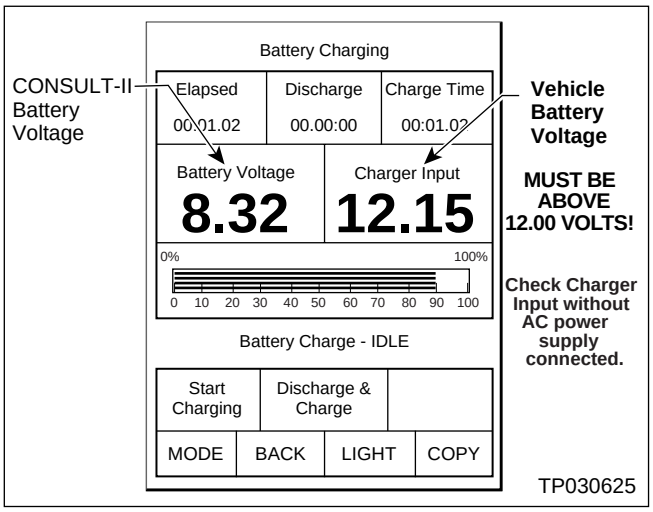

Figure D

NOTE:

- **"Battery Voltage"** is the voltage level of CONSULT-II's battery.

  "Charger Input" is the voltage level of the vehicle's battery. **(It must be above 12 volts.)**

CAUTION: If the **"Charger Input"** is below 12 volts:

- A list of items to check is contained in the "ECM Reprogramming For Nissan Vehicles" general procedure. Click *here.* This will link you to the list.

Step 3: Reprogram the ECM

- If you are not familiar with **ECM** Reprogramming, click *here*:
- This will link you back to a general procedure called "ECM Reprogramming For Nissan Vehicles."

Step 4: "Wrap-up" After Reprogramming is Finished

1. Turn the ignition switch OFF and CONSULT-II OFF.
2. Wait more than 10 seconds, then;
   a. Turn the ignition switch ON for 2 second, then
   b. Turn the ignition switch OFF again for 10 seconds (see Figure E).
      - This will reset ECM "self learned" Data.

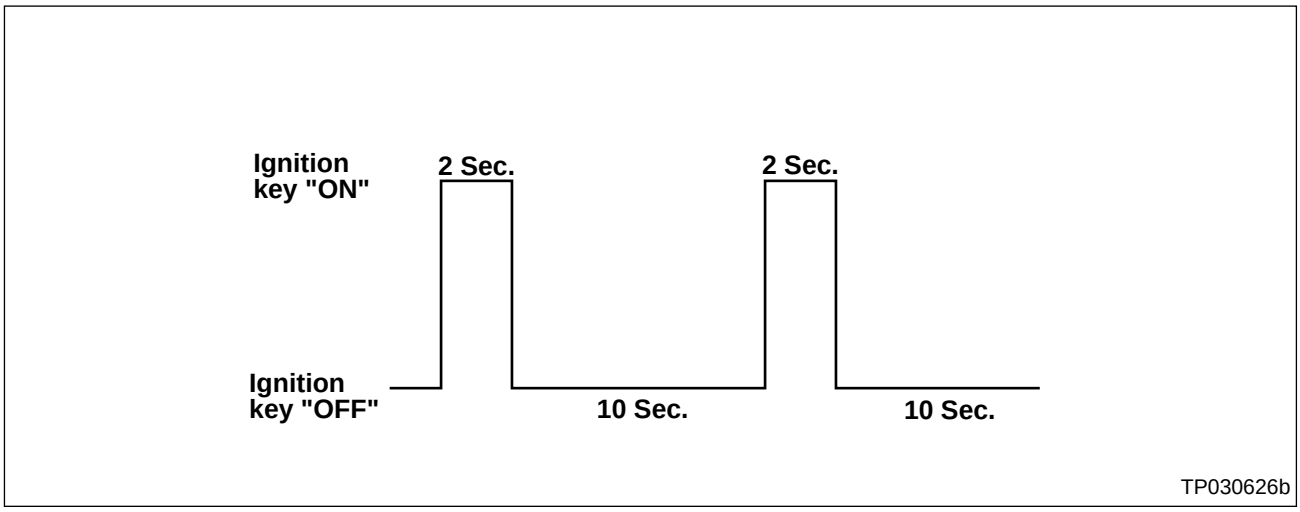

Figure E

3. Start the engine and check the idle speed.
   - If idle speed is too low, perform Idle Air Volume Learning (IAVL). See the appropriate Service Manual (ESM) for this procedure.

     NOTE: If the engine will not idle, hold the engine RPM at about 2000, then slowly bring it down to an idle. IAVL can now be performed.

4. Confirm the engine is operating normally.

5. Make sure the MIL is OFF.
   - If the MIL comes ON, use CONSULT-II with the Diagnostic (red/white) Card to erase any DTC's that may have stored during the reprogramming procedure.