



SERVICE BULLETIN

Classification:

EC04-008a

Reference:

NTB04-032a

Date:

October 29, 2004

2004 TITAN AND ARMADA; MIL "ON" WITH DTC P1031, P1051, P1148, P1168 A/F SENSOR HEATER / CLOSED LOOP

This bulletin amends NTB04-032. The table in the Service Procedure has been amended.
Please discard all paper copies of the earlier version.

APPLIED VEHICLES: 2004 Titan (A60)
2004 Armada (TA60)

IF YOU CONFIRM:

A MIL "ON" with the following DTC(s) stored:

- P1031 / P1051 (A/F Sensor Heater), and/or
- P1148 / P1168 (A/F Sensor Closed Loop Control),

ACTIONS:

A. Confirm this bulletin applies:

- Check the Current ECM Part Number (see page 2).
- Compare your Current ECM Part Number to Chart A on page 2.

**If that part number does not match one in Chart A, this bulletin does not apply.
Go back to ASIST for further diagnostic and repair information.**

B. Reprogram the ECM (see page 3).

C. Perform A/F Sensor test to confirm proper air fuel operation (see page 7).

CLAIMS INFORMATION

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

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Reprogram ECM per TSB	(1)	DE98AA (2)	HD	32	0.8 hrs (2)

(1) Reference the final CONSULT-II print-out and use the indicated new ECM P/N as the PFP.

(2) FRT allows adequate time to access DTC codes, reprogram ECM and perform the A/F Sensor function test. No other diagnostic procedures subsequently required – do NOT claim any Diagnostic Op Codes with this claim.

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

Step A: Confirm This Bulletin Applies

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 will be used to see if this bulletin applies or not.

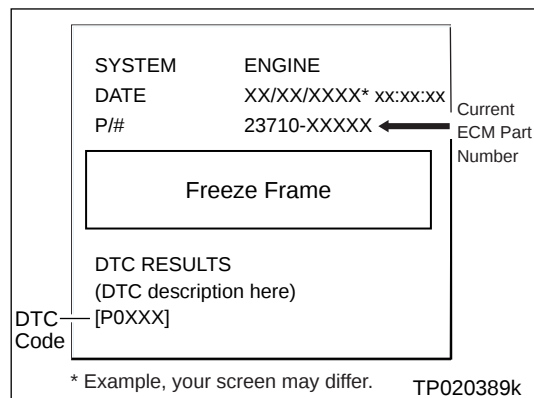


Figure 1

3. Check the ECM Part Number on the printout from Step 1 (Figure 1);

- Compare your vehicle's ECM P/N to those shown under **Current ECM P/N** in **Chart A**, below:
- If it's in that column, this bulletin applies.

Chart A

VEHICLE	PACKAGE	Current ECM P/N
Titan	2WD	23710-7S800
	2WD with Tow Package	23710-7S815
	2WD with Tow Package and VDC	23710-7S810
	4WD	23710-7S065
	4WD with Tow Package and VDC	23710-7S075
Armada	2WD with VDC	23710-7S005
	2WD with Tow Package and VDC	23710-7S015
	4WD with VDC	23710-7S860
	4WD with Tow Package and VDC	23710-7S870

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

- Perform **ECM Reprogramming**, starting on page 3, then
- Perform A/F Sensor Test (see page 7).

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

- **This bulletin does not apply.** Refer to ASIST for further diagnostic and repair information.

Step B: ECM REPROGRAMMING

Vehicle ECM Reprogramming Overview

- There are four basic steps
 1. Download reprogramming data (transfer it) from ASIST into CONSULT-II.
 2. "Preparation" steps before reprogramming.
 3. Reprogram the vehicle ECM.
 4. ECM Reprogramming "Wrap-up".

NOTE:

- If you're not familiar with the latest ECM reprogramming procedures, click [here](#).

This will link you to the "ECM Reprogramming For Nissan Vehicles" general procedure. Or, refer to Attachment A in the print copy of this bulletin.
- For those familiar with ECM Reprogramming, please review the following steps and use them as a Quick Reference for ECM reprogramming.

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

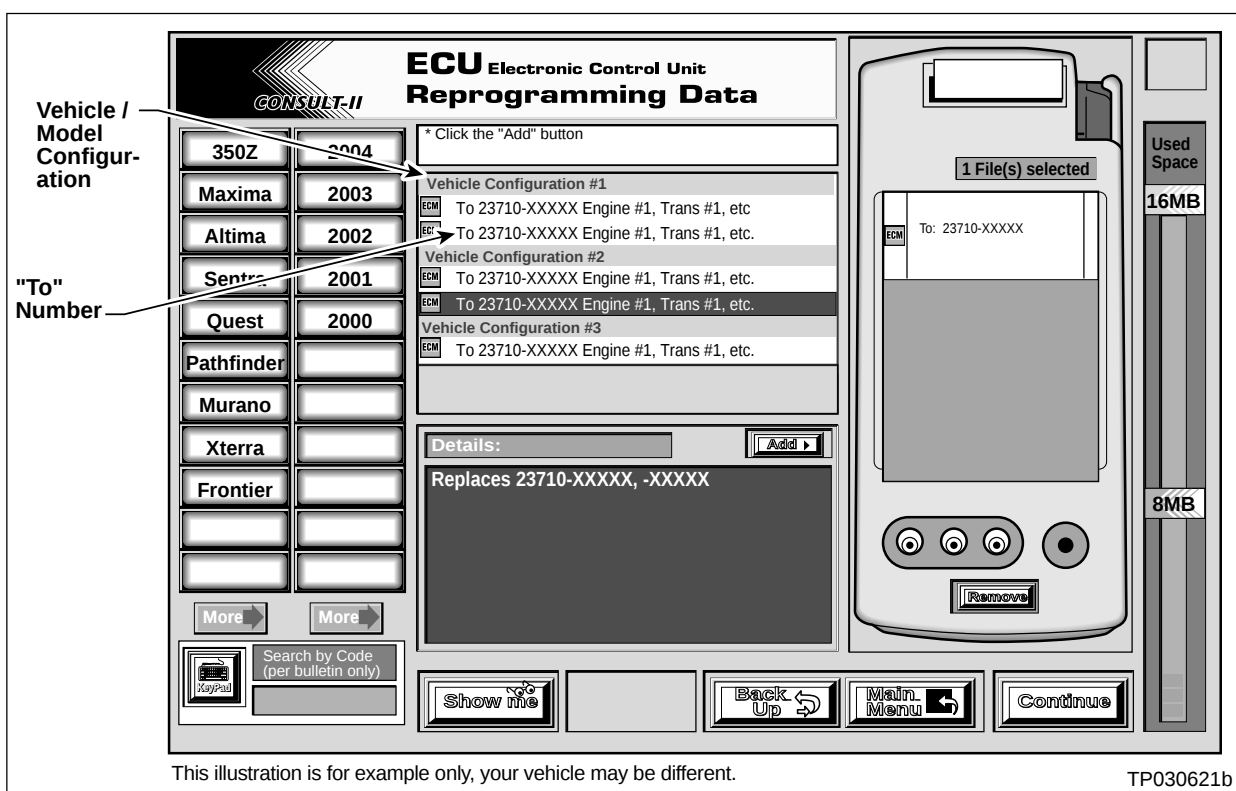


Figure A

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

2. Select the correct reprogramming data:
 - a. Locate the specific “Model Configuration” (Example: VK56DE, 5AT, VDC).
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. (Write the “To” number on the repair order.)
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 Two: Preparation for Reprogramming ECM

1. Connect a battery charger to the vehicle's battery.
 - Set the charger to a low charger rate (trickle charge).

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

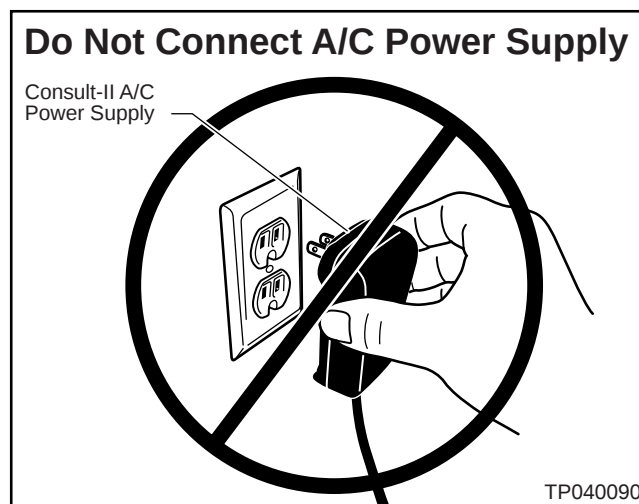


Figure B

2. Press **SUB MODE** (see Figure C) then:
 - a. From the listed items, find and select **BATTERY CHARGE**.

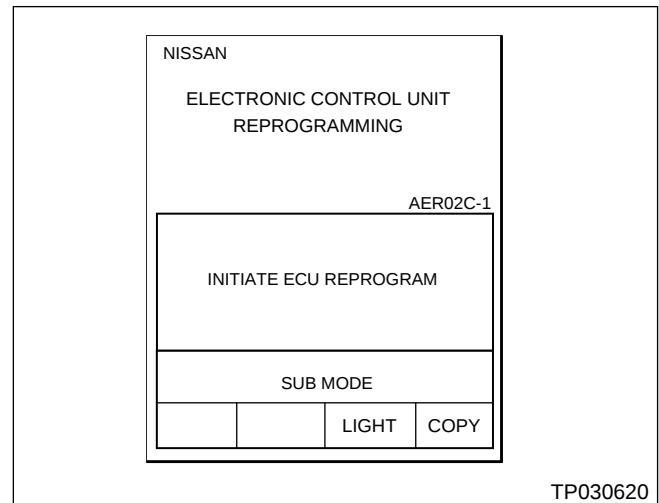


Figure C

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

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.)**

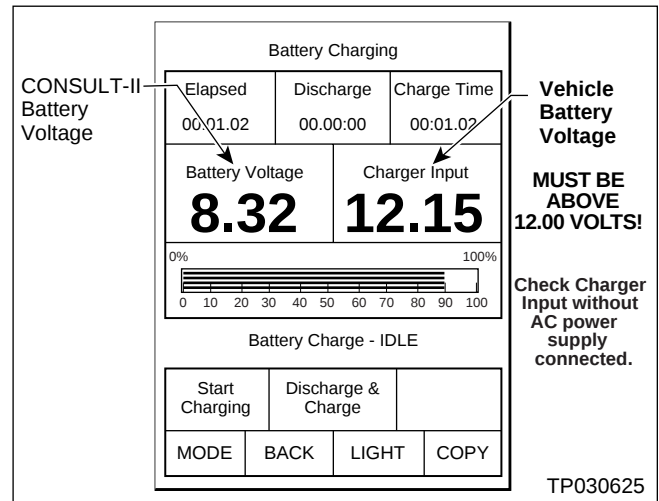


Figure D

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

- A list of items to check when **"Charger Input"** voltage is below 12V is contained in the "ECM Reprogramming For Nissan Vehicles" general procedure. Click [here](#) to link to it.
- The "ECM Reprogramming For Nissan Vehicles" general procedure can also be found in Attachment A in the print copy of this bulletin.

Step Three: Reprogram the Vehicle ECM

Step Four: "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.

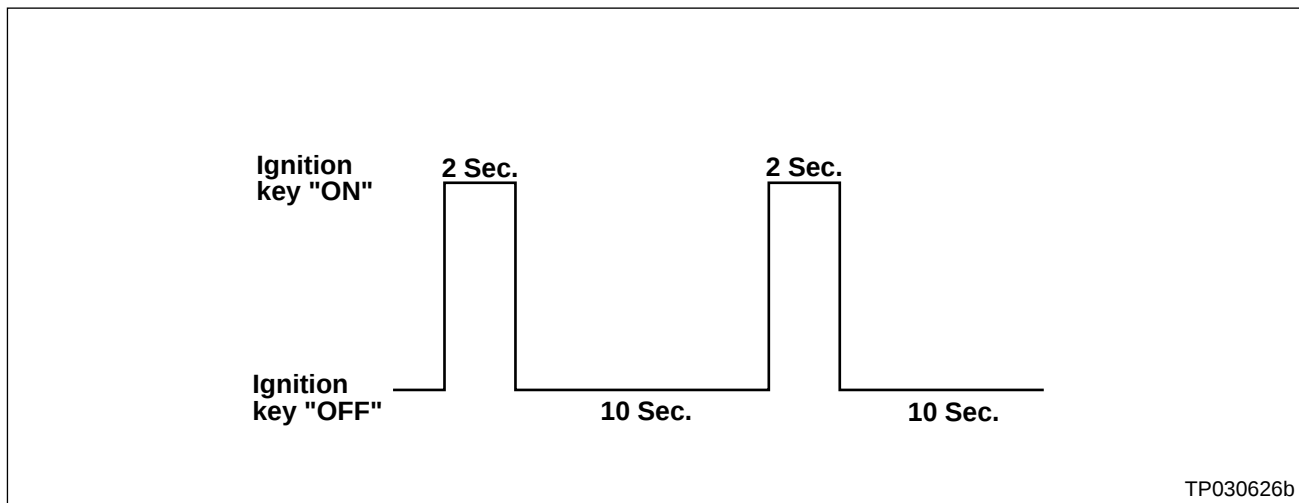


Figure E

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.

Step C: Perform A/F Sensor Test

1. Use CONSULT-II DATA MONITOR to view;
 - Engine Speed, and
 - A/F Sensor voltage (see Figure 2).
2. Hold the engine speed at about 2000 rpm no-load for 2 minutes.
 - This will create a stable condition for step 3 (below).

DATA MONITOR	
MONITOR	NO DTC
ENG SPEED	2072 rpm
COOLANT TEMP/S	183 F
A/F SEN1 (B1)	1.49 V
A/F SEN1 (B2)	1.52 V

TP030660

Figure 2

3. Observe A/F SEN1 (B1) and A/F SEN1 (B2) voltage for 30 seconds while holding 2000 rpm no-load.
 - a. A/F sensor voltages should remain (most of the time) between 1.37 and 1.57 volts.
 - If the engine rpm is held constant, voltage will fluctuate, but should remain in this range.
 - b. If, most of the time, the A/F sensor voltages are out of this range:
 - The vehicle has an additional incident.
 - This bulletin does not have repair information for an A/F Sensor or Fuel Management System incident.
 - Use the appropriate Service Manual (ESM), section EC (P1031 / P1051 / P1148 / P1168), to further diagnosis and repair the additional incident.