



SERVICE BULLETIN

Classification:

EC04-005

Reference:

NTB04-024

Date:

February 19, 2004

2004 MAXIMA & QUEST (4 SPD A/T OR 6 SPD M/T ONLY); MIL "ON" WITH DTC P1031, P1051, P1148, P1168 A/F SENSOR HEATER / CLOSED LOOP

APPLIED VEHICLES: 2004 Maxima (A34) with 4 speed A/T or 6 speed M/T only
2004 Quest (V42) with 4 speed A/T only

NOTE: Models with 5 speed A/T are not applicable to this TSB
For those vehicles, refer to NTB04-028

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:

1. Confirm this bulletin applies:

- Check the Current ECM Part Number (steps 1 and 2 in the Service Procedure on page 2).
- Compare your Current ECM Part Number to Chart A on page 2.

If your Current ECM part number does not match one in Chart A, this bulletin does not apply. Refer to the appropriate TSB or Service Manual (ESM) for further diagnostic and repair information.

2. Reprogram the ECM (needed if a match is found during **ECM Part Number Check** on page 2).
3. Perform A/F Sensor test (steps 4 – 6 on page 3).

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

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

SERVICE PROCEDURE

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.

- The Freeze Frame data that you’ve printed contains the ECM Part Number (P/N).
- Figure 1 is an example of the F.F. Data printout.

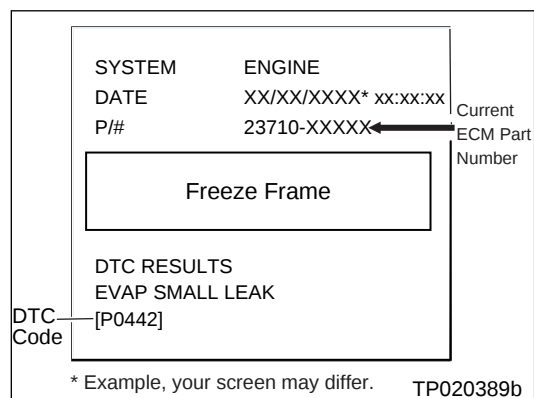


Figure 1

ECM Part Number Check:

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

- Compare the vehicle's current ECM P/N to those shown under **Current ECM P/N** in **Chart A**, below:
- This comparison will allow you to determine if the ECM needs to be reprogrammed.

Chart A

VEHICLE	PACKAGE	Current ECM P/N
Maxima	4 speed A/T	23710-8Y100, -8Y101, -8Y102, -8Y103, -8Y104, -8Y105
	4 speed A/T with TCS	23710-8Y110, -8Y111, -8Y112, -8Y113, -8Y114, -8Y115
	6 speed M/T	23710-7Y000, -7Y001, -7Y002, -7Y003, -7Y004, 7Y005
	6 speed M/T with TCS	23710-7Y010
	5 speed A/T with TCS	This TSB does not apply. See NTB04-028
	5 speed A/T	This TSB does not apply. See NTB04-028
Quest	4 speed A/T	23710-CK005, -CK006, -CK007, -CK008
	5 speed A/T	This TSB does not apply. See NTB04-028

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 (step 4 on page 3).

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 the appropriate TSB or Electronic Service Manual (ESM) for further diagnostic and repair information.

Perform A/F Sensor Test

4. Use CONSULT-II DATA MONITOR to view;
 - Engine Speed, and
 - A/F Sensor voltage (see Figure 2).
5. Hold the engine speed at about 2000 rpm no-load for 2 minutes.
 - This will create a stable condition for step 6.

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

6. 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.

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. "Wrap-up" after reprogramming is finished.

- 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

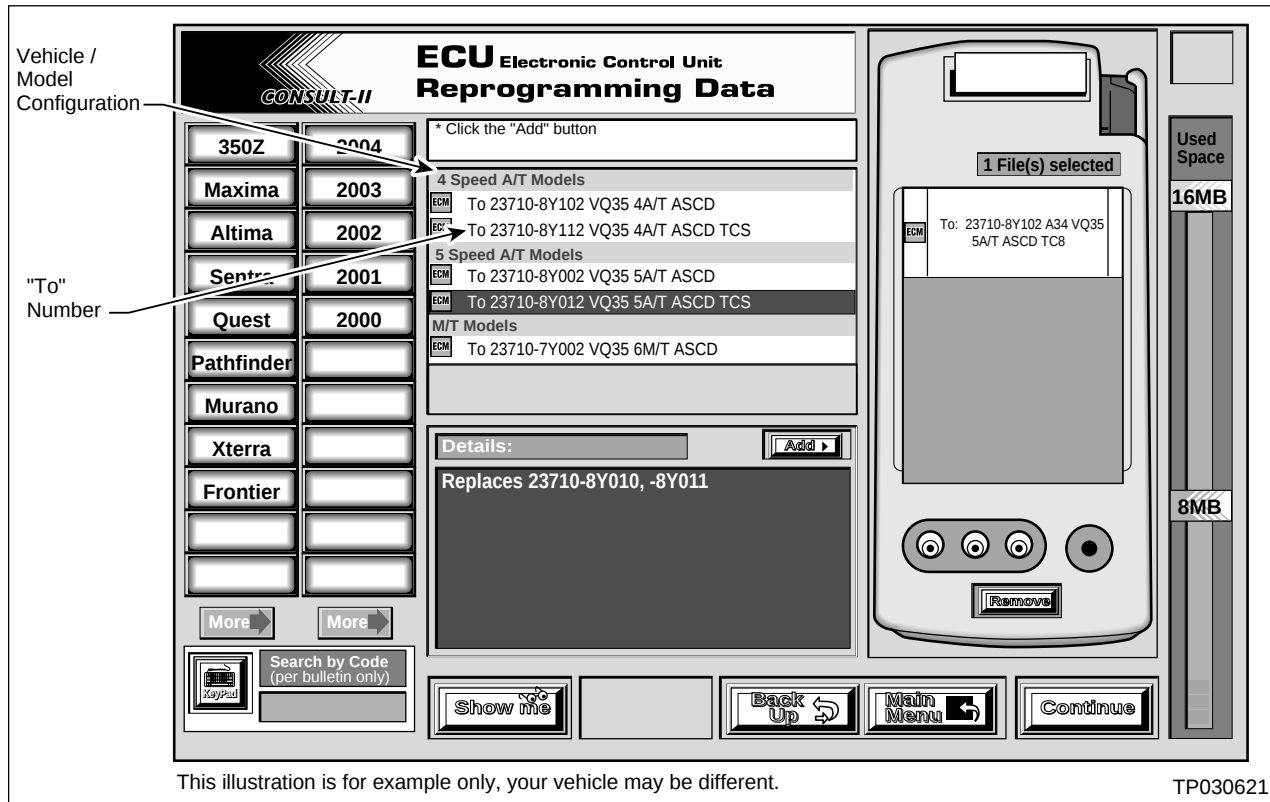


Figure A

1. Select vehicle model and model year (Example: Maxima, 2004).
2. Select the correct reprogramming data:
 - a. Locate the specific "Model Configuration" (Example: VQ35 4A/T ASCD TCS).
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 selected data to the "File(s) Selected" list.
4. 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: DO NOT connect the CONSULT-II AC power supply for items 2 and 3.

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

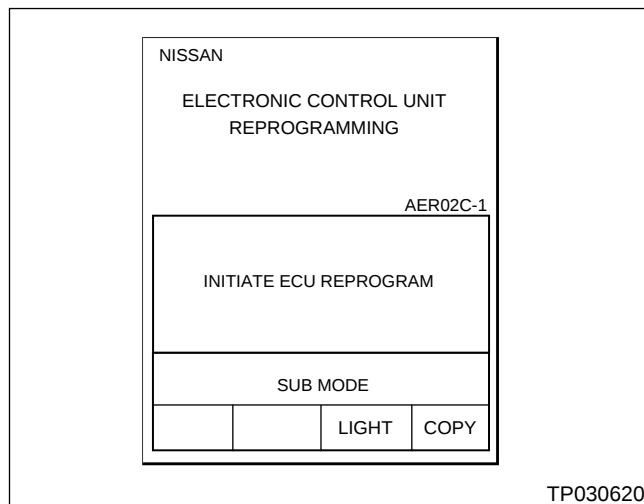


Figure B

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

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.)**

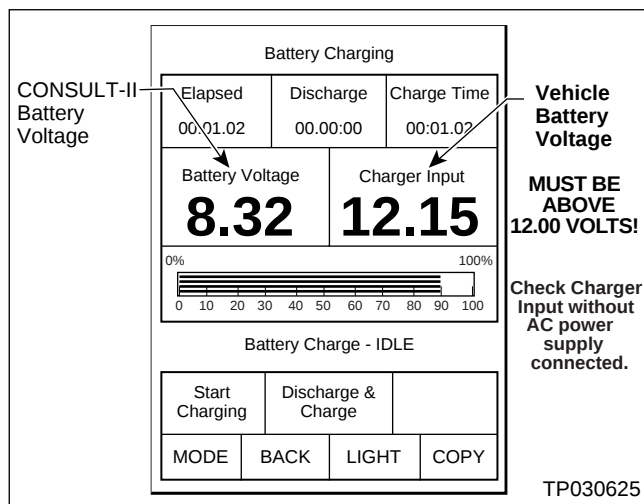


Figure C

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

- Click [here](#) to link to the "ECM Reprogramming For Nissan Vehicles" general procedure, or refer to Attachment A in the print copy of this bulletin.
- The general procedure includes a list of items to check when "Charger Input" voltage is below 12V.

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 1 second, then
 - b. Turn the ignition switch "OFF" again for 10 seconds (see Figure D).
 - This will reset ECM “self learned” Data.

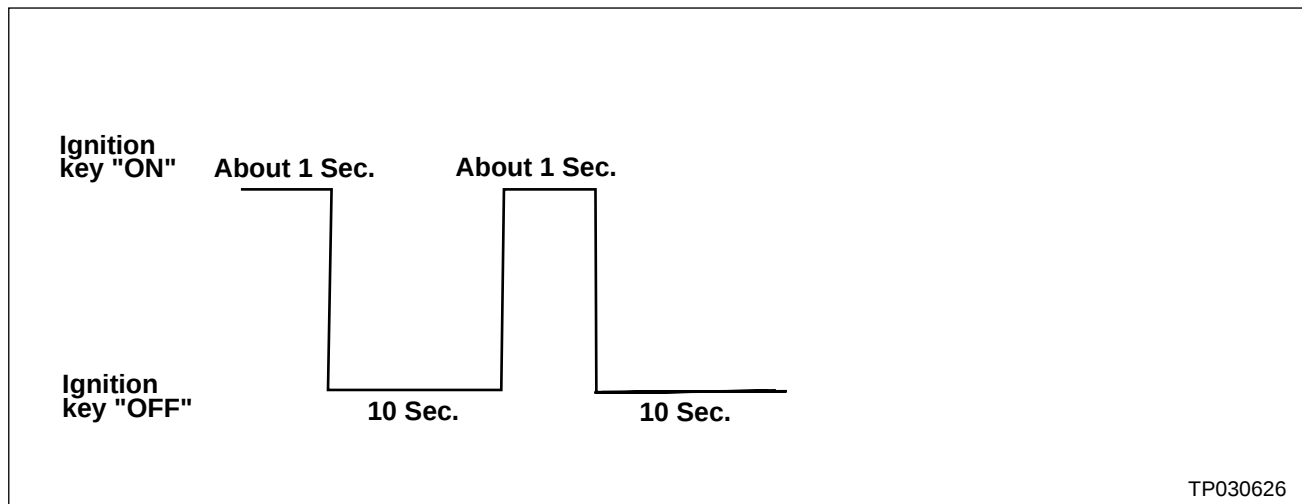


Figure D

3. Start the engine and check the idle speed.
 - If idle speed is too low, perform IAVL (Idle Air Volume Learning). 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 “Check Engine Light “ (MIL) is not “ON”.
 - If necessary, use CONSULT-II and the Diagnostic (red/white) Card to erase any DTC’s that may have stored during the reprogramming procedure.