

SERVICE BULLETIN

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Date:

2004 – 2006 QX56; POOR A/C COOLING AT IDLE WITH HIGH AMBIENT TEMPERATURES

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

APPLIED VEHICLES: 2004 – 2006 QX56 (JA60)

IF YOU CONFIRM:

Poor A/C cooling during engine idle or at low speeds with high outside (ambient) temperatures,

ACTIONS:

Step A: Confirm if the vehicle requires ECM Reprogramming:

- Check the Current ECM Part Number (page 2).
- Compare your Current ECM Part Number to Chart A (page 3).

Step B: If needed, reprogram the ECM (page 4).

Step C: Replace the engine cooling fan coupling—fan clutch (page 9)

• ONLY for vehicles built before: VIN: 5N3AA*8**5N808124 / Date: March 23, 2005

Step D: Replace the Condenser Fan / Motor Assembly (page 9).

Step E: Install the plastic air dam (page 10).

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 <u>entire</u> Service Procedure (starting on page 2) as it contains information that is essential to successfully completing this repair.

Infiniti 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 Infiniti dealer to determine if this applies to your vehicle.

PARTS INFORMATION

DESCRIPTION	PART #	QUANTITY
Coupling Assy – Fan (Fan Clutch)	21082-7S00A	1
Fan & Motor Assy – Condenser	92120-ZC200	1
Seal-Lower (Plastic Air Dam)	92183-ZC00A	1

CLAIMS INFORMATION

If the ECM P/N IS on Chart A, submit a Primary Part (PP) type line claim using the following claims coding:

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Reprogram ECM per Technical Bulletin (1)	(2)	DE98AA	ZE	32	0.7 hrs

(1) FRT includes sufficient time for diagnosis. DO NOT claim any diagnostic Op Codes for this reprogram operation. FRT also includes allowance for IAVL, if needed.

(2) Reference the final CONSULT II reprogram function print out and use the indicated P/N as the PFP.

And, on a separate line:

IF the vehicle was built before VIN: 5N3AA*8**5N808124 / Date: March 23, 2005

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
RPL Engine Cooling Fan	(3)	CC14AA	ZE	32	(4)
Coupling					

(3) Reference the Parts Information Table and use the indicated Cooling Fan Coupling Assy P/N as the PFP.
(4) Deference the surrent Infiniti Warrenty Flat Data Manual and use the indicated FDT.

(4) Reference the current Infiniti Warranty Flat Rate Manual and use the indicated FRT.

And, on a separate line:

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
RPL Condenser Fan/Motor Assy	(5)	TD32AA	ZE	32	(6)

(5) Reference the Parts Information Table and use the indicated Condenser Fan/Motor Assy as the PFP.

(6) Reference the current Infiniti Warranty Flat Rate Manual and use the indicated FRT.

And, on a separate line:

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
R&R Engine Under Cover and	(7)	CD30AA	ZE	32	(8)
Install Seal					

(7) Reference the FAST Parts Catalog and use the applicable <u>A/C Condenser</u> P/N as the PFP.

(8) Reference the current Infiniti Warranty Flat Rate Manual and use the indicated FRT

SERVICE PROCEDURE

Step A: Confirm if the vehicle requires ECM Reprogramming

Check the Current ECM Part Number (P/N)

1. With CONSULT-II "ON", print the ECM Part Number as follows:

START(Nissan) >> ENGINE >> ECM PART NUMBER >> COPY

- 2. Attach this printout to the Repair Order.
 - Figure 1 is an example of the ECM Part Number printout.
 - You will use the ECM Part Number (P/N) to confirm if your vehicle needs reprogramming.



Figure 1

Compare Your Current ECM P/N To Chart A

- 3. Using the ECM P/N printout from Step 2 (Figure 1):
 - Compare your vehicle's ECM P/N to those shown under Current ECM P/N in Chart A, below:

Chart A

CAUTION: It is best to refer to the Current ECM P/N to determine the vehicle configuration.

VEHICLE	VEHICLE/MODEL	Current ECM P/N	
	CONFIGURATION		
2004 QX56	2WD, ASCD	23710-7S060, -7S061, -7S062	
	2WD, ICC	23710-7S020, -7S021, -7S022	
	4WD, ASCD	23710-7S880, -7S881, -7S882	
	4WD, ICC	23710-7S875, -7S876, -7S877	
2005 QX56	2WD, ASCD	23710-ZC015	
	2WD, ICC	23710-ZC010	
	4WD, ASCD	23710-ZC070	
	4WD, ICC	23710-ZC065	
2006 QX56	Reprogramming is not needed		

A. If your vehicle's ECM P/N matches one of the Current ECM P/N's in the chart above:

- Reprogramming is needed. Continue with Step B, Reprogram the ECM (next page).
- B. If your vehicle's ECM P/N does not match one of the Current ECM P/N's in the chart above:
 - Reprogramming is <u>NOT</u> needed. Continue with Step C (page 9).

Step B: Reprogram the ECM

Vehicle ECU Reprogramming Overview

- There are <u>four</u> basic steps.
- Step 1: Download reprogramming data (transfer it) from ASIST into CONSULT-II using the ECU Reprogramming Card (orange/white).
- Step 2: "Preparation" steps before reprogramming.
- Step 3: Reprogram the ECM.
- Step 4: ECM reprogramming "Wrap-up".
- If you are familiar with ECM reprogramming:
 - Review **Step One** through **Step Four**—starting on the next page.
 - Use these steps as a "Quick Reference" for ECM reprogramming.
- If you are not familiar with ECM Reprogramming, click here:
 - This will link you to the "ECM Reprogramming for Infiniti Vehicles" general procedure.



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

Figure 2

- 1. Select vehicle model and model year (Example: QX56 2004).
- 2. Select the correct Reprogramming Data:
 - a. Locate the specific "Vehicle Configuration" (Example: A/T, ASCD).

NOTE: Vehicle 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 for your Vehicle Configuration for the Reprogramming Data. (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 the on-screen directions to perform "data transfer" (download) from ASIST into CONSULT-II.

Step Two: Preparation Steps Before Reprogramming

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

CAUTION: For step 2 below, and step 3 on the next page, DO NOT connect the CONSULT-II AC power supply.



- 2. Press **SUB MODE** (see Figure 4) then:
 - From the listed items, find and select **BATTERY CHARGE**



3. Check the CONSULT-II's "Charger Input" reading (see Figure 5).

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 5

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

• A list of items to check is contained in the "ECM Reprogramming for Infiniti Vehicles" general procedure. Click <u>here</u>; This will link you to the list.

Step Three: 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 Infiniti Vehicles"

Step Four: ECM Reprogramming "Wrap-up"

- 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 seconds, then
 - b. Turn the ignition switch "OFF" again for 10 seconds (see Figure 6).
 - This will reset ECM "self learned" Data.



- 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.
 - Use CONSULT-II with the Diagnostic (red/white) Card to erase any DTC's that may have stored during the reprogramming procedure.
- 6. Continue with Step C, next page.

Step C: Replace the Engine cooling fan coupling (fan clutch) with the new one listed in the Parts Information.

• For replacement information; refer to the ESM > section CO > ENGINE COOLING FAN > Removal and Installation (Crankshaft Driven Type).

NOTE:

- Step C above <u>ONLY</u> applies to vehicles built <u>before</u> VIN: 5N3AA*8**5N808124 / Date: March 23, 2005
- For all other vehicles, skip Step C and continue with Step D.

Step D: Replace the condenser fan & motor assembly with the new one listed in the Parts Information.

- For replacement information; refer to the ESM > section CO > ENGINE COOLING FAN > Removal and Installation (Motor Driven Type).
- Before re-assembly, perform Step E on the next page.

Step E: Install the plastic air dam

- The plastic air dam (seal-lower) is listed in the Parts Information.
- 1. Install the plastic air dam as shown in Figure 7.
 - Slide/push the J-clips onto the radiator support.



Figure 7