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Classification: EC13-016a

ITB13-053a

Reference:

2011 - 2012 QX56; MIL "ON" WITH DTC P0420 AND/OR P0430

This bulletin has been amended. Replacement of the A/F sensor, and the exhaust manifold and three way catalyst have been added to the Service Procedure. Please discard previous versions of this bulletin.

APPLIED VEHICLES: 2011 – 2012 QX56 (Z62)

IF YOU CONFIRM

MIL "ON" with DTC P0420 and/or P0430 (Three Way Catalyst Function),

ACTION:

- 1. Reprogram the ECM (if needed).
 - Refer to step 6 in the SERVICE PROCEDURE to confirm reprogramming is needed.
- 2. Replace three way catalyst and A/F sensor as follows:
 - If DTC P0420 is stored, replace Bank 1 exhaust manifold and three way catalyst, and A/F sensor.
 - If DTC P0430 is stored, replace Bank 2 exhaust manifold and three way catalyst, and A/F sensor.

IMPORTANT: The purpose of ACTION (above) is to give you a guick 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.

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.

SERVICE PROCEDURE

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: 70 105°C (158 - 221°F)
 - ➤ Battery voltage: More than 12.9V (at idle)
 - > Transmission: Warmed up



Figure A

NOTE: After reprogramming is complete, you will be required to perform Throttle Valve Closed Position, Idle Air Volume Learn, Accelerator Closed Position, and DTC erase. The above conditions are required for IAVL to complete.

CAUTION:

- Connect the GR8 to the 12V battery and set to ECM power supply mode.
 If the vehicle battery voltage drops below 12.0V or above 15.5V during reprogramming, the ECM may be damaged.
- Be sure to turn OFF all vehicle electrical loads.
 If a vehicle electrical load remains ON, the ECM may be damaged.
- 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® devices (e.g., cell phones, printers, etc.) within range of the CONSULT PC and the VI. If Bluetooth® signal waves are within range of the CONSULT PC during reprogramming, reprogramming may be interrupted and the ECM may be damaged.

- 1. **Connect the CONSULT PC** to the vehicle to begin the reprogramming procedure.
- 2 Open / start C-III plus.
- 3. Wait for the plus VI to be recognized.
 - The Serial No. will display when the plus VI is recognized.
- 4. Select Re/programming, Configuration.

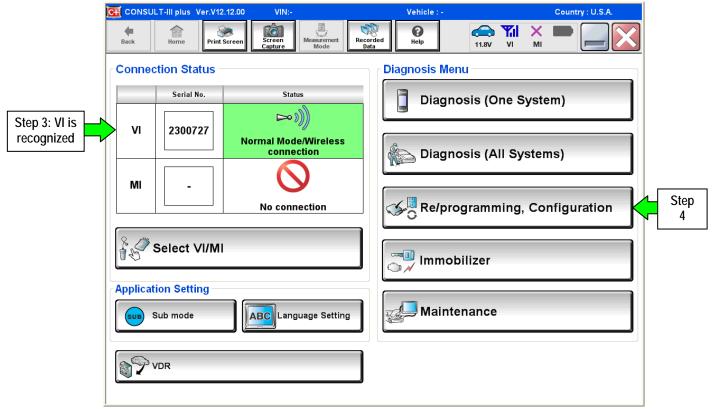


Figure 1

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.

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

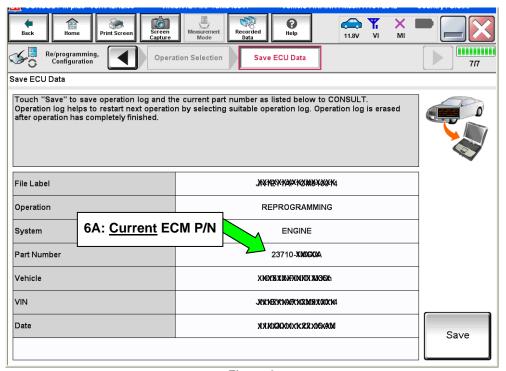


Figure 2

- 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>, reprogramming <u>is needed</u>. Continue with the reprogramming procedure.
 - If there is <u>not a match</u>, reprogramming is <u>not needed</u>. Skip to step 19 on page 11.

Table A

Model	Current ECM Part Number: 23710-			
2011 QX56	1LA3B, 1LA3C, 1LA3D, 1LA3E			
	1LS0A, 1LS0B, 1LS0C, 1LS0D			
	1LA4B, 1LA4C, 1LA4D, 1LA4E			
	1LS1A, 1LS1B, 1LS1C, 1LS1D			
	1LA5B, 1LA5C, 1LA5D, 1LA5E,			
	1LS2A, 1LS2B, 1LS2C, 1LS2D,			
	1LA6B, 1LA6C, 1LA6D, 1LA6E			
	1LS3A, 1LS3B, 1LS3C, 1LS3D,			
	17001 17000 17000 17000			
	1ZS0A, 1ZS0B, 1ZS0C, 1ZS0D, 1ZS0E			
	1YN0A, 1YN0B			
	1ZS1A, 1ZS1B, 1ZS1C, 1ZS1D, 1ZS1E			
2012 QX56	1YN1A, 1YN1B			
	1ZS2A, 1ZS2B, 1ZS2C, 1ZS2D, 1ZS2E			
	1YN2A, 1YN2B			
	1ZS3A, 1ZS3B, 1ZS3C, 1ZS3D, 1ZS3E			
	1YN3A, 1YN3B			
	1YN4A, 1YN5A, 1YN6A, 1YN7A			

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.
 - If more than one new P/N is available, the screen in Figure 3 displays.
 - Select and use the reprogramming option that <u>does not</u> have the message "Caution! Use ONLY with ITBXX-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.

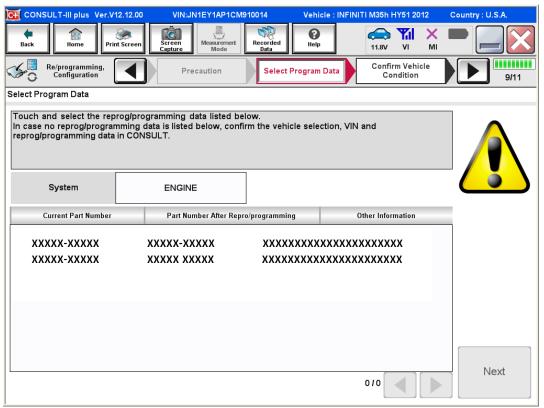


Figure 3

8. When the screen in Figure 4 displays, reprogramming is complete.

NOTE: If the screen in Figure 4 does not display (reprogramming does no complete), refer to ECM recovery on the next page.

- 9. Disconnect the GR8 (battery charger) from the vehicle.
- 10. Select Next.

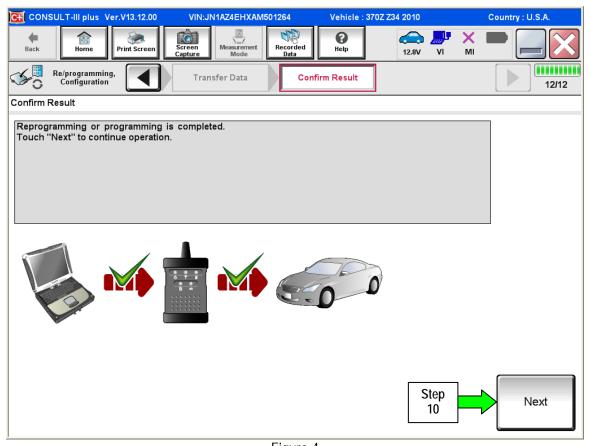


Figure 4

NOTE:

- In the next steps, starting on page 9, 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.

ECM recovery:

Do not disconnect plus VI or shut down Consult 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® devices are OFF.
- All electrical loads are OFF.
- Select <u>retry</u> and follow the on screen instructions.
- "Retry" may not go through on first attempt and can be selected more than once.

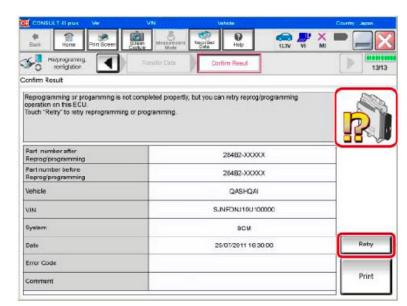


Figure 5

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.

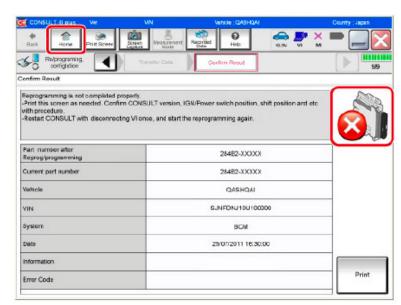


Figure 6

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 -105° C (158 - 221°F) Battery voltage: More than 12.9V (At idle) Selector lever: P or N Electric load switch: OFF (Air conditioner, headlamp, rear window defogger) Steering wheel: Neutral (Straight-ahead position) Vehicle speed: Stopped 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.

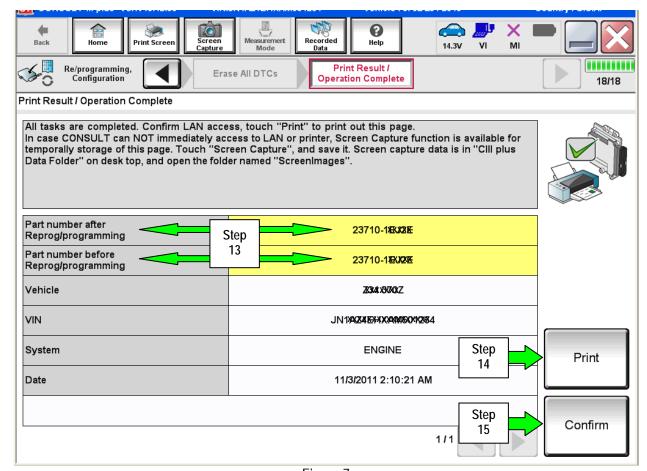
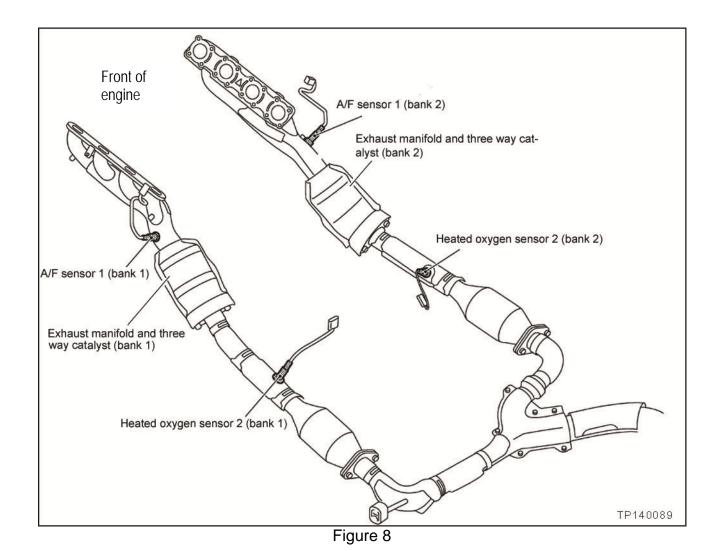


Figure 7

- 16. Close C-III plus.
- 17. Turn the ignition OFF.
- 18. Disconnect the plus VI from the vehicle.

- 19. Replace the three way catalyst and A/F sensor as follows:
 - If DTC P0420 is stored, replace Bank 1 exhaust manifold and three way catalyst, and A/F sensor
 - If DTC P0430 is stored, replace Bank 2 exhaust manifold and three way catalyst, and AF sensor.
 - Refer to the Electronic Service Manual (ESM), Section EM-Engine Mechanical, for replacement information.



20. Test drive the vehicle and make sure it operates correctly and the MIL is OFF.

PARTS INFORMATION

DESCRIPTION	PART #	QUANTITY
Manifold Assy-Exh (Exhaust manifold and three way catalyst - Bank 1)	14002 - 1LA0C	1
Manifold Assy-Exh (Exhaust manifold and three way catalyst - Bank 2)	14002 - 1LA0D	1
A/F Sensor 1 (Bank 1 or Bank 2)	22693 - 1LAOC	1 per side
Gasket-Manifold (Bank 1 or Bank 2)	14036 - 1LA0A	1 per side
Gasket (Ring gasket –font of front tube)	20691 - 30P00	1 per side
Gasket (Rear of front tube)	20692 - 24U0A	1 per side

CLAIMS INFORMATION

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

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Reprogram Engine Control Module	(1)	DE97AA	ZE	32	(2) (3)

⁽¹⁾ Refer to the electronic parts catalog (FAST or equivalent) and use the ECM part number as the Primary Failed Part (PFP).

- (2) Reference the current Infiniti Warranty Flat Rate Manual and use the indicated FRT.
- (3) FRT allows adequate time to access DTC codes and reprogram ECM. No other diagnostic procedures subsequently required. Do NOT claim any Diagnostic Op Codes with this claim.

And If needed on the same repair line

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Rpl Manifold Catalytic Converter Right Side (Bank 2)	(1)	AT46AA	ZE	32	(2)

⁽¹⁾ Refer to the electronic parts catalog (FAST or equivalent) and use the ECM part number as the Primary Failed Part (PFP).

AND/OR

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Rpl Manifold Catalytic Converter Left Side (Bank 1)	(1)	AT47AA	ZE	32	(2)

⁽¹⁾ Refer to the electronic parts catalog (FAST or equivalent) and use the ECM part number as the Primary Failed Part (PFP).

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

⁽²⁾ Reference the current Infiniti Warranty Flat Rate Manual and use the indicated FRT