

Classification:

Reference:

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Date

EC15-018 ITB15-033

December 1, 2015

2015 QX80; MIL ON WITH DTC FOR A/F SENSOR

APPLIED VEHICLE: 2015 QX80 (Z62) APPLIED ENGINE: VK56VD (V8)

IF YOU CONFIRM:

The MIL is ON with one or more of the following DTCs stored:

Bank 1

- P2096, P2097 POST CAT FUEL TRIM SYS B1
- P0130, P0131, P0132 A/F SENSOR1 (B1)
- P0031, P0032 A/F SEN1 HTR (B1)
- P014C, P014D, P015A, P015B Air fuel ratio (A/F) sensor 1 (bank 1)

Bank 2

- P2098, P2099 POST CAT FUEL TRIM SYS B2
- P0150, P0151, P0152 A/F SENSOR1 (B2)
- P0051, P0052 A/F SEN1 HTR (B2)
- P014E, P014F, P015C, P015D Air fuel ratio (A/F) sensor 1 (bank 2)

ACTION:

- 1. Refer to step 6 in the SERVICE PROCEDURE to confirm ECM reprogramming applies.
- 2. If reprogramming applies, reprogram the ECM.
- 3. Replace only the A/F sensors related to the stored DTCs.
 - If stored DTCs are for only one bank, replace only one A/F sensor for that bank.
 - If stored DTCs are for both banks, replace both A/F sensors.

NOTE: Do NOT replace both A/F sensors if the stored DTC(s) are for only one bank.

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

ECM Reprogramming

- 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.

Preparation for Reprogramming

- 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 ECM reprogramming is complete, you will be required to perform Throttle Valve Closed Position, Idle Air Volume Learn (IAVL), and Accelerator Closed Position.
- The above conditions are required for the IAVL to complete.

CAUTION:

- Connect the GR8 battery charger to the vehicle battery.
 The vehicle battery voltage must stay between <u>12.0V and 15.5V</u> during reprogramming, <u>or the ECM/TCM may be damaged</u>.
- Be sure to turn OFF all vehicle electrical loads.
 If a vehicle electrical load remains ON, the ECM/TCM 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/TCM 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/TCM may be damaged.

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

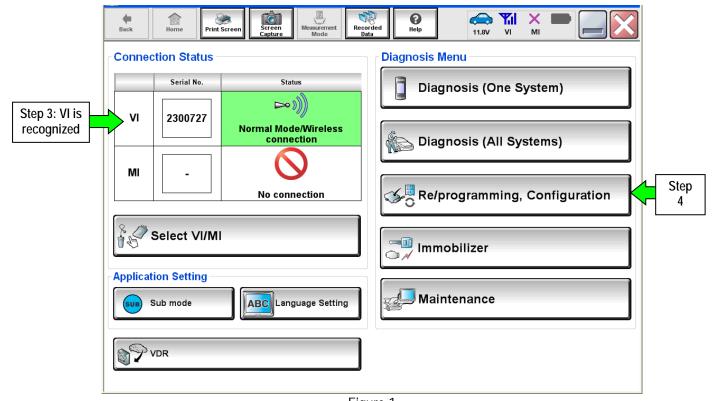


Figure 1

5. Follow the on-screen instructions and navigate 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).

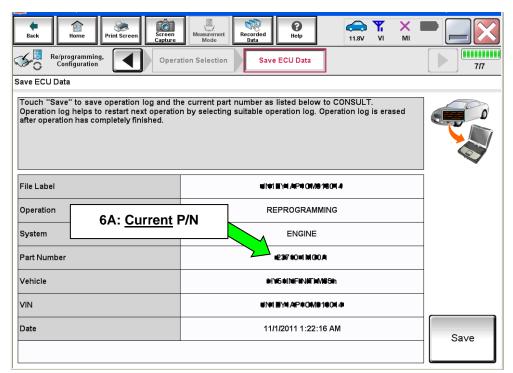


Figure 2

- B. Compare the P/N you wrote down to the numbers in the **CURRENT ECM PART NUMBER** column in **Table A** below.
 - If there is a **match**, this bulletin **applies**. Continue with the reprogramming procedure.
 - If there is **not a match**, ECM reprogramming **does not apply**. Go to <u>Replace A/F Sensor</u> on page 10.

Table A

CURRENT ECM PART NUMBER: 23710-				
5ZA0B, 5ZA1B, 5ZA2B, 5ZA3B				
5ZB0B, 5ZB0C				
5ZA0D, 5ZA1D, 5ZA2D, 5ZA3D				
5ZA0C, 5ZA1C, 5ZA2C, 5ZA3C				

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.
 - ➤ In this case, 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. Close C-III plus and refer back to ASIST for further diagnosis.

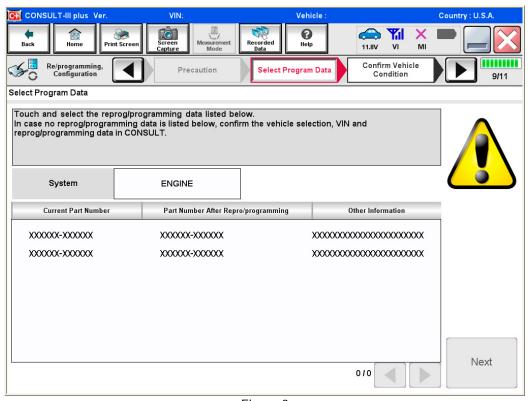


Figure 3

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

NOTE: If the screen in Figure 4 does <u>not</u> display (indicating that reprogramming did not complete), refer to the information on the next page.

9. Disconnect the battery charger from the vehicle.

10. Select Next.

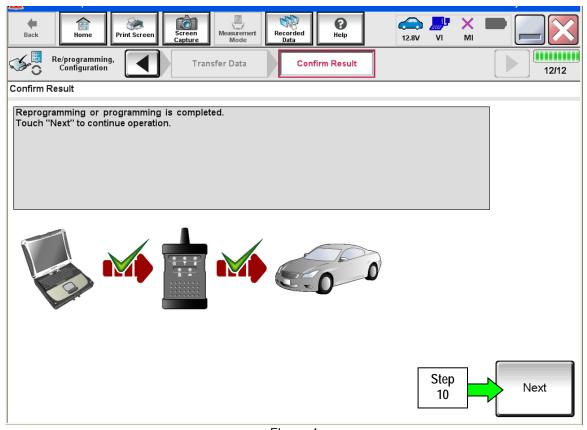


Figure 4

NOTE:

- In the next steps (page 8), 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 \underline{not} 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.

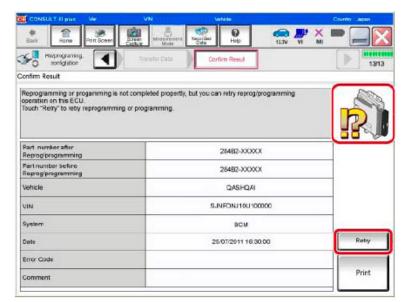


Figure 5

If reprogramming does \underline{not} 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 / 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.

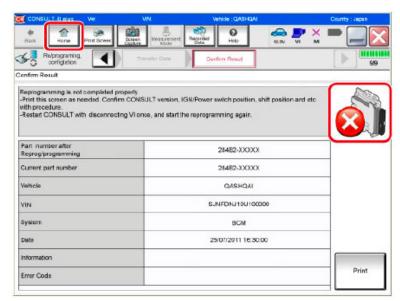


Figure 6

11. Follow the on-screen instructions to perform the following:							
•	Throttle Valve Closed Position.						
•	Idle Air Volume Learn (IAVL).						
	NOTE:						
	➤ Listed below are the conditions required for IAVL to complete.						
	> If IAVL does not complete within a few minutes, a condition may be out of range.						
		0	Engine coolant temperature: 70 -105°C (158 - 221°F).				
		0	Battery voltage: More than 12.9V (At idle).				
		0	Selector lever: P or N.				
		0	Electric load switch: OFF (Air conditioner, headlamp, and rear window defogger).				
		0	Steering wheel: Neutral (Straight-ahead position).				
		0	Vehicle speed: Stopped.				
		0	Transmission: Warmed up (ATF TEMP SE less than 0.9V).				
Accelerator Pedal Close Position Learning.							
•	Era	ise I	DTCs.				
Cor	ntinu	ie ta	o 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.

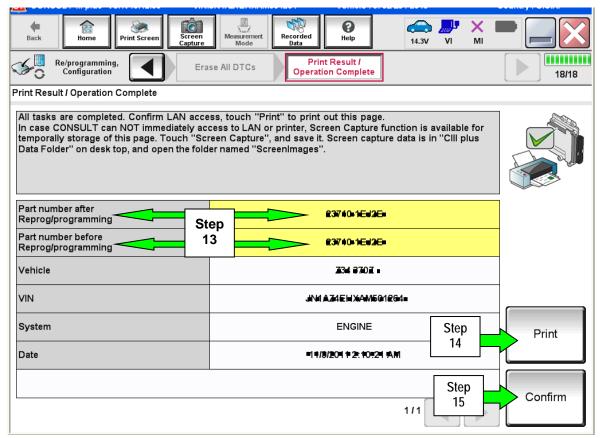


Figure 7

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

Go to the next page.

Replace A/F Sensor

- 1. Replace only the A/F sensor related to the stored DTCs.
 - If stored DTCs are for only one bank, replace only one A/F sensor for that bank.
 - If stored DTCs are for <u>both banks</u>, replace both <u>A/F sensors</u>.
 - Refer to the Electronic Service Manual (ESM), section EM-Engine Mechanical, for replacement information.

NOTE: Do NOT replace both A/F sensors if the stored DTC(s) are for only one bank.

- 2. Test drive the vehicle and make sure it operates correctly and the MIL is OFF.
 - If the MIL comes ON, go back to ASIST for further diagnostic information.
 - Diagnosis and repairs beyond the contents of this bulletin are not covered by this bulletin.

PARTS INFORMATION

DESCRIPTION	PART NUMBER	QTY
A/F Sensor	22693-1PM0A	1 or 2
(Bank 1 and Bank 2)	22093-1FWOA	as needed

NOTE: Both banks use the same A/F sensor Part Number.

CLAIMS INFORMATION

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

Replace A/F Sensor

One

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
RPL ONE AIR/FUEL RATIO SENSOR	(1)	DE53AA	HD	32	(2)

⁽¹⁾ Use the A/F sensor part number listed above in the parts information table as the PFP.

Or

Both

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
RPL BOTH AIR/FUEL RATIO	(1)	DE55AA	HD	32	(2)
SENSORS					

⁽¹⁾ Use the A/F sensor part number listed above in the parts information table as the PFP.

And on the same repair line:

DESCRIPTION	OP CODE	FRT
Reprogram ECM	DE97AA	(2)

⁽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.

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

NOTE: FRT allows adequate time to access DTC codes. No other diagnostic procedures subsequently required. Do NOT claim any diagnostic OP Codes with this claim.