

SERVICE CAMPAIGN BULLETIN

Classification: EC18-027 Reference:

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ITB18-036

October 24, 2018

VOLUNTARY SERVICE CAMPAIGN 2018 QX60; ELECTRIC INTAKE VALVE TIMING CONTROL MODULE REPROGRAMMING

CAMPAIGN ID #: APPLIED VEHICLES: PC662 2018 QX60 (L50)

Check Service COMM or Dealer Business Systems (DBS) National Service History to confirm campaign eligibility.

INTRODUCTION

Infiniti is conducting this voluntary service campaign on certain specific 2018 QX60 vehicles to reprogram the electric Intake Valve Timing (IVT) control module. This service will be performed at no charge to the customer for parts or labor.

IDENTIFICATION NUMBER

Infiniti has assigned identification number PC662 to this campaign. This number must appear on all communication and documentation of any nature dealing with this campaign.

DEALER RESPONSIBILITY

Dealers are to repair vehicles falling within range of this campaign that enter the service department. This includes vehicles purchased from private parties, vehicles presented by transient (tourists) owners, and vehicles in a dealer's inventory.

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 retailer to determine if this applies to your vehicle.

REPAIR OVERVIEW



REQUIRED SPECIAL TOOLS

eVTC reprogramming kit (J-52601)

- Each dealer has been shipped one eVTC reprogramming kit (J-52601).
- Tool kit includes:
 - ➢ eVTC reprogramming tool.
 - ➢ Mini USB cable
 - Reprogramming harness
- Additional tools can be obtained from Tech-Mate at 1-800-662-2001.



Figure 1

SERVICE PROCEDURE

1. Write down the radio settings.

Presets	1		2	3	4	5	6
AM							
FM 1							
FM 2							
SAT 1							
SAT 2							
Bass		Treble	;	Balance	Fade	Speed S Vol.	Sen.

- 2. Write down any settings that will be lost when the 12 volt battery is disconnected.
 - Refer to the ESM for a listing of systems that may lose memory after disconnecting the 12 volt battery.
 - Navigate to ELECTRICAL & POWER CONTROL > POWER SUPPLY, GROUND & CIRCUIT ELEMENTS > BASIC INSPECTION > INSPECTION AND ADJUSTMENT > ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL
 - This list often includes items such as radio, climate control, clock, etc.
- 3. Turn the ignition OFF.
- 4. Disconnect the negative battery cable.
- 5. Remove the two 10 mm bolts securing the front air duct.
- 6. Remove the front air duct.



Figure 2

- 7. Remove the two 10 mm ground bolts shown in Figure 3.
 - Position the ground leads out of the way (down to the left) to allow clearance to temporarily connect the eVTC reprogramming harness to the electric IVT control module.



Figure 3

- 8. Disconnect electric IVT control module's connector F106.
 - Depress locking tab while removing connector F106 from the electric IVT control module.
 - Once disconnected, temporarily position the connector to the left out of the way.

IMPORTANT: Use caution when connecting and disconnecting electrical connectors to prevent pin damage.



Figure 4

- 9. Disconnect the electric IVT control module's connector F105.
 - Depress locking tab (below the white locking lever) while lifting the white locking lever.
 - Once disconnected, temporarily position the connector to the left out of the way.

IMPORTANT: Use caution when connecting and disconnecting electrical connectors to prevent pin damage.



Figure 5

10. Connect reprogramming connector "B" to the electric IVT control module's F105 location.

IMPORTANT: Use caution when connecting and disconnecting electrical connectors to prevent pin damage.

11. Connect reprogramming connector "A" to the electric IVT control module's F106 location.

IMPORTANT: Use caution when connecting and disconnecting electrical connectors to prevent pin damage.



Figure 6

- 12. Connect the mini USB cable to your CONSULT PC USB port.
- 13. Connect the A/C adapter to your CONSULT PC.
- 14. Turn ON your CONSULT PC.



Figure 7

- 15. Open ASIST.
- 16. Open the "Specialty Tools" tab on the left side of the screen.
- 17. Select "PC661 and PC662 eIVT Reprogram" link. The screen shown in Figure 9 will display.



18. Select "Read Revision" to view the electric IVT control module's current software version.

SeproTool CALID: 9PJ1A CVN: DDC1E716	
Read Revision	
Update to Latest Revision	Result: 🥝
Exit	Voltage: 0,1V
Press Key to start Reprogramming	





- 19. Compare the "Software Version detected" to the "Software Version available."
 - If the "Software Version detected" is **THE SAME** as the "Software Version available" then reprogramming **IS NOT** required, skip to step 24.
 - If the "Software Version detected" is **DIFFERENT** than "Software Version available" then reprogramming **IS** required, continue to the next step (step 20).

NOTE: The "Software Version detected" will be different than the "Software Version available" if reprogramming is required.

20. Select the "Update to Latest Revision" button as shown in Figure 11.

ReproTool CALID: 9PJ1A CVN: DDC1E716	
Read Revision	
Update to Latest Revision	Result: 🥝
Exit	Voltage: 0,1V
ready	
ReProTool Detected Engine line detected: ZV5k4-9PJ0A Software Version detected: B271-22036 Software Version available: B271-22042 Control unit is to be updated to: software version: B271-22042 engine line: ZV5k4-9PJ1A	

Figure 11

21. The electric IVT control module reprogramming will complete after a few seconds. Reprogramming screen is shown in Figure 12.

😪 ReproTool	CALID: 9PJ1A	CVN: DDC1E716		ĸ
	()	Read Revision		>
	Updat	e to Latest Revision	Result: 🥝	
		Exit	Voltage: 7,7V	
Flashing				
ReProTool Dete Engine line dete Software Versie Software Versie Control unit is t software versie	ected ected: ZV5k4-9PJ0/ on detected: B271- on available: B271- o be updated to: on: B271-22042	A 22036 22042 engine line: ZV5k4-9PJ1A		

Figure 12

- 22. Verify the message "flash process finished successfully" as shown in Figure 13.
 - If this message does not display, refer to **ERROR SCREENS** on page 14.
- 23. Select "Exit."

😵 ReproTool CALID: 9PJ1A CVN: DDC1E716	_ _ ×
Read Revision	
Update to Latest Revision	Result: 🥝
Exit	Voltage: 0,1V
ready	
ReProTool Detected Engine line detected: ZV5k4-9PJ0A Software Version detected: B271-22036 Software Version available: B271-22042 Control unit is to be updated to: software version: B271-22042 engine e: ZV5k4-9PJ1A	ed
mash process milished successfully	

Figure 13

24. Disconnect reprogramming connector "A" and "B" from the electric IVT control module.

IMPORTANT: Use caution when connecting and disconnecting electrical connectors to prevent pin damage.



Figure 14

- 25. Connect the electric IVT control module's connector F105.
 - Fold the lever down to seat connector F105.

IMPORTANT: Use caution when connecting and disconnecting electrical connectors to prevent pin damage.



Figure 15

- 26. Connect the electric IVT control module's F106 connector.
 - Listen for a "click" sound to verify connector F106 is properly seated.

IMPORTANT: Use caution when connecting and disconnecting electrical connectors to prevent pin damage.



Figure 16

27. Install ground bolts shown in Figure 17.

 Torque bolts to 5.5 N•m (0.56 kg-m, 49 in-lb).



Figure 17

- 28. Install the front air duct.
- 29. Install the two 10 mm bolts securing the front air duct.
 - Torque bolts to 5.5 N•m (0.56 kg-m, 49 in-lb).
- 30. Install the negative battery cable.



Figure 18

- 31. Reset/reinitialize systems as needed.
 - Refer to the ESM for a listing of systems that require reset/initialization after reconnecting the 12V battery.
 - Navigate to ELECTRICAL & POWER CONTROL > POWER SUPPLY, GROUND & CIRCUIT ELEMENTS > BASIC INSPECTION > INSPECTION AND ADJUSTMENT > ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL
 - This list often includes items such as radio, power windows, clock, sunroof, etc.

ERROR SCREENS

If an error should occur, refer to the following for possible causes.

The error in Figure 19 indicates that eVTC reprogramming tool (J-52601) has a poor USB connection.

- a. Inspect the USB connection on the CONSULT PC and the eVTC reprogramming tool (J-52601).
- b. If the connections are secure, try a known good mini USB cable and retry reprogramming.

ReproTool CALID: 9PJ1A CVN: DDC1E716	
Read Revision	
Update to Latest Revision	Result: 🥝
Exit	Voltage: 0,0V
stopped	
ReProTool is not connected to USB port	
	·

Figure 19

The error in Figure 20 indicates that eVTC reprogramming tool (J-52601) has a poor reprogramming harness connection.

- a. Inspect the round connector at the eVTC reprogramming tool (J-52601).
- b. Inspect connector A and B on the electric IVT control module.
- c. If the connections are secure, try a known good reprogramming harness.

NOTE: Additional tools can be obtained from Tech-Mate at 1-800-662-2001.

SeproTool CALID: 9PJ1A CVN: DDC1E716	
Read Revision	
Update to Latest Revision	Result: 🥝
Exit	Voltage: 0,1V
Initializing	
ReProTool Detected Software Version available: B271-22042 Control unit is to be updated to:	
software version: B271-22042 engine line: ZV5k4-9PJ1A No qualified answer on CAN bus received! Try reprogramming again flash process failed	

Figure 20

CLAIMS INFORMATION

CAMPAIGN ("CM") ID	DESCRIPTION	OP CODE	FRT
PC662	Reprogram Electric Intake Valve Timing (IVT) control module	PC6620	0.4 hrs.
	Reprogram not required	PC6621	0.3 hrs.

Submit a "CM" line claim using the following claims coding:

AMENDMENT HISTORY

PUBLISHED DATE	REFERENCE	DESCRIPTION
October 24, 2018	ITB18-036	Original bulletin published