

Classification:

EC12-009

Reference:

ITB12-018

Date:

April 10, 2012

ECM REPLACEMENT PROCEDURES WITH CONSULT III PLUS

APPLIED VEHICLES: All 2004 and later

IF YOU CONFIRM:

The Electronic Control Module (ECM) needs to be replaced on a 2004 MY and later vehicle.

ACTIONS:

After installing ECM:

- Perform ECM Re-communicating Function (if supported).
- Perform the "ACCELERATOR PEDAL & THROTTLE VALVE CLOSED POSITION LEARNING" procedure (see step 3).
- Perform the "IDLE AIR VOL LEARNING" procedure (when applicable) using CONSULT-III plus (CIII plus). (See step 4)
- For 2005 and later vehicles, enter the vehicle VIN into the new ECM (see step 5).
- Check for any new updates for the new ECM you're installing (see step 6).

CAUTION:

- Failure to perform all the work steps in the specified order can cause poor engine running, MIL 'ON', or vehicle emission test rejection.
- Some vehicles may have **Additional Services When Replacing the ECM** not covered within this bulletin. Refer to the model specific ESM and CIII plus "Maintenance" tab for any additional model specific services.

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 entire Service Procedure (starting on page 3) 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.

CLAIMS INFORMATION

If the ECM is replaced WITHOUT re-programming, submit a Primary Failed Part (PP) line using the following claims coding:

DESCRIPTION	PFP	OP CODE	SYM	DIAG	FRT
Replace Engine Control Module	(4)	DE28AA	(2)	32	(3)
Reprogram New ECM		DE97AA			(3)
Combination, if required: Enter VIN into ECM. 2005-up vehicles ONLY.		DE281A			0.2
Perform Idle Air Volume Learning procedure (6)		DE96AA (6)			(3)

PLUS, if required

DESCRIPTION	PFP	OP CODE	SYM	DIAG	FRT
Reprogram NATS Immobilizer key(s)	(4)	RL49AA	(2)	32	(3)

PLUS, if required

DESCRIPTION	PFP	OP CODE	SYM	DIAG	FRT
As per the indicated Section "E" Diagnostic Op Code	(4)	(5)	(2)	32	(3)

OR

If the ECM is replaced and requires re-programming, submit a Primary Failed Part (PP) line using the following claims coding:

NOTE: You MUST retain the final CONSULT-II printout with the ECM P/N and Calibration ID number and attach it to the work order as a permanent record.

DESCRIPTION	PFP	OP CODE	SYM	DIAG	FRT
Replace Engine Control Module	(4)	DE28AA	(2)	32	(3)
Reprogram New ECM		DE97AA			(3)
Combination, if required: Enter VIN into ECM. 2005-up vehicles ONLY.		DE281A			0.2
Perform Idle Air Volume Learning procedure (6)		DE96AA (6)			(3)

PLUS, if required

DESCRIPTION	PFP	OP CODE	SYM	DIAG	FRT
Reprogram NATS Immobilizer key(s)	(4)	RL49AA	(2)	32	(3)

PLUS, if required

DESCRIPTION	PFP	OP CODE	SYM	DIAG	FRT
As per the indicated Section "E" Diagnostic Op Code	(4)	(5)	(2)	32	(3)

NOTES:

- (1) Use the indicated ECM P/N as the PFP.
- (2) Use the customer complaint.
- (3) Reference the current Infiniti Flat Rate Manual and use the indicated Flat Rate Time for the vehicle being repaired.
- (4) Reference the final CONSULT-II printout and use the indicated ECM P/N as the PFP.
- (5) As Indicated from the Main Section "E" diagnostic Op Code.
- (6) Includes adequate time to perform the "ACCELERATOR PEDAL & THROTTLE VALVE CLOSED POSITION LEARNING" procedure.

SERVICE PROCEDURE

ECM Re-communication Function

1. Re-communicate the ECM with the BCM or Intelligent key.
 - Performing the following procedure can automatically perform a re-communication of a new ECM with a BCM or Intelligent Key unit (not all models supported) so that the NATS keys do not need to be registered.
 - This Function will **only** work when the ECM has been replaced with a new one which has never been energized onboard.
 - If this function is not supported all of the keys may need to be individually registered.
 - a. Install new ECM.
 - b. Use a registered key (*) to turn ignition switch to "ON".
 - * To perform this step, use a key that is registered to the original ECM that was replaced.
 - c. Maintain ignition switch in the "ON" position for at least 5 seconds.
 - d. Turn ignition switch to "OFF".
 - e. Start engine.
 - If engine can be started continue to step 3.
2. If engine will NOT start, after you perform the ECM Re-Communication Function, all ignition keys will need to be individually registered, including spare keys with CIII plus and then proceed with step 3.
 - Refer to the Immobilizer tab on the CIII plus home page to register keys.

NOTE:

- When registering new Key IDs or replacing the ECM with other than brand new unit, refer to the Immobilizer tab on the CIII plus home page.
- **If multiple keys are attached to the key holder, separate them before work.**
- **Distinguish keys with unregistered key ID from those with registered ID.**

Accelerator Pedal & Throttle Valve Closed Position Learning

3. Perform the Accelerator Pedal & Throttle Valve Closed Position Learning as follows:
 - a. Make sure the accelerator pedal is fully released.
 - b. Turn the ignition switch "ON" for 2 seconds.
 - c. Turn the ignition switch "OFF" for 10 seconds.
 - d. Turn the ignition switch "ON" for 2 seconds, then
 - e. Turn the ignition switch "OFF" again for 10 seconds (see Figure 1).
 - f. Proceed with step 4 (next page).

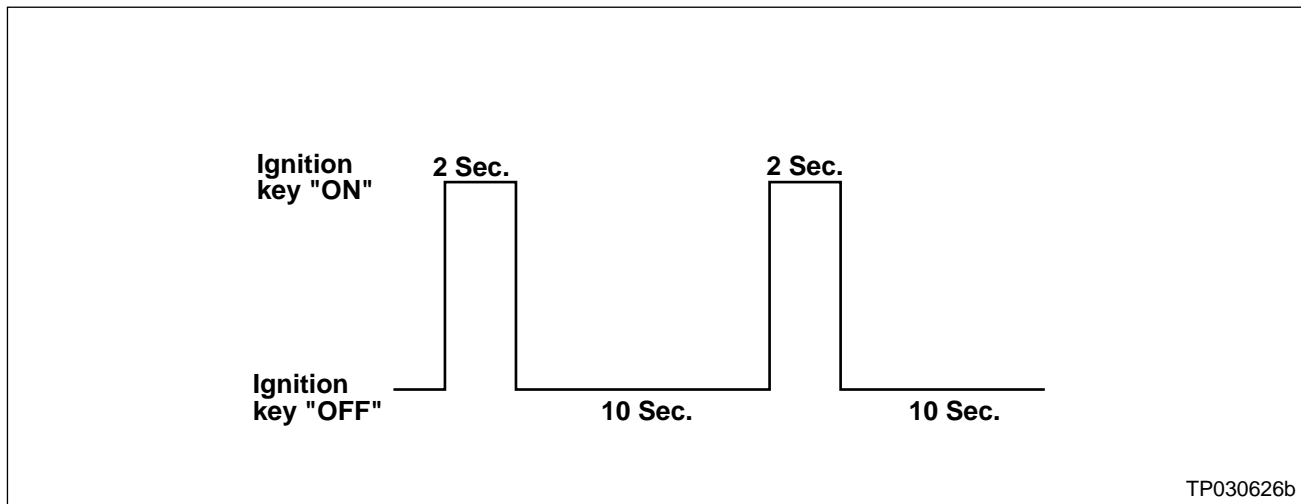


Figure 1

Perform Idle Air Volume Learning (IAVL)

NOTE: Make sure all electrical loads are turned OFF, including A/C, defroster, radio, lights, etc. while performing the following procedures. Also, make sure the engine cooling fans are NOT operating during the following procedures.

4. Perform the Idle Air Volume Learning procedure as follows:

- a. Connect CIII plus to the vehicle.
- b. Warm up engine and transmission to operating temperature.

NOTE: Vehicle may have to be driven to warm transmission enough to allow IAVL to complete.

- c. In the CIII plus "Maintenance mode", select "IDLE AIR VOL LEARN" and then "Confirm". See Figure 2.

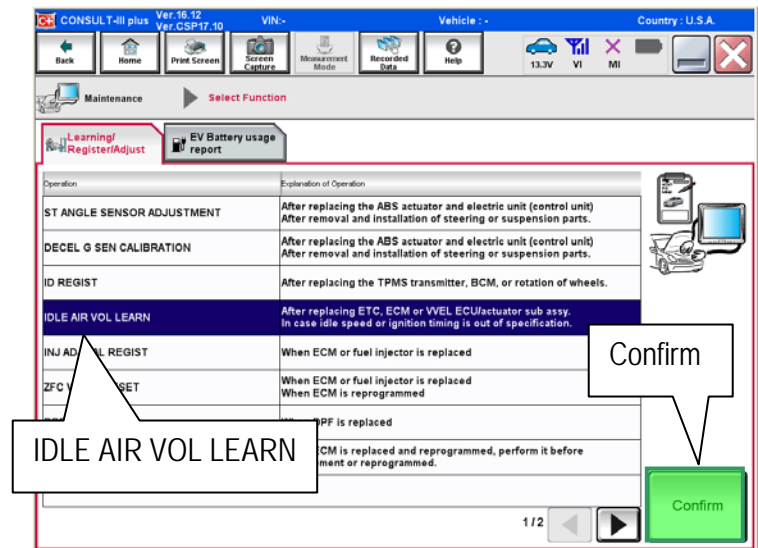


Figure 2

- d. Press "Next" then "Start" on the IDLE AIR VOL LEARN screen. See Figure 3.

- START cannot be selected until all operating conditions have been met.

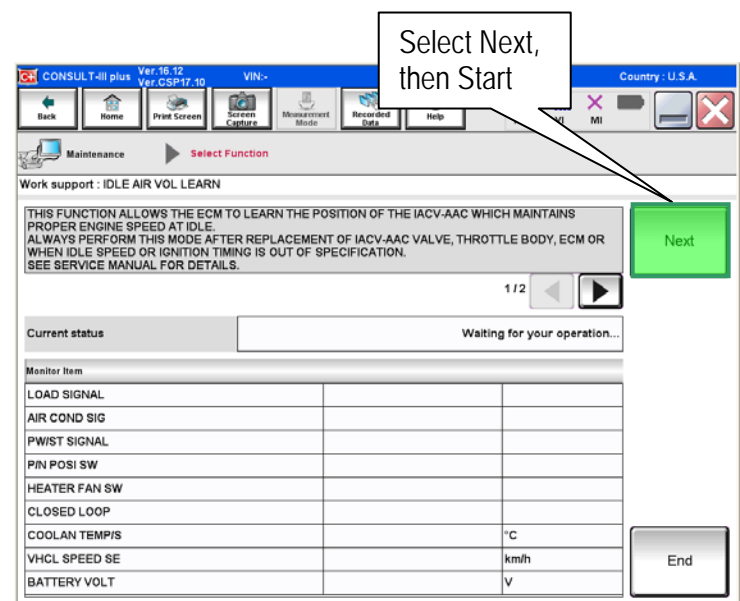


Figure 3

- The IAVL procedure will take several minutes to complete.
- CIII plus will display "EXECUTING" in the "Current status" box while the IAVL procedure is in process. See Figure 4.

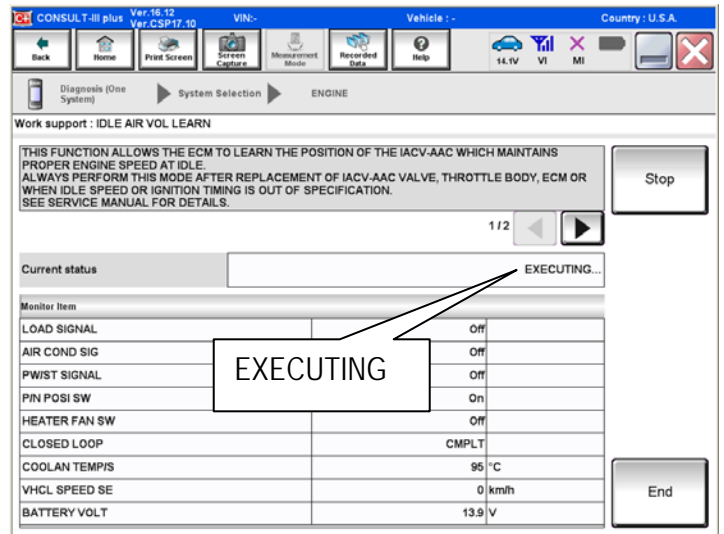


Figure 4

- CIII plus will display "COMPLETE" in the Current status box when the IAVL procedure is finished. See Figure 5.

f. Once the IAVL procedure is finished, proceed with step 5 (next page).

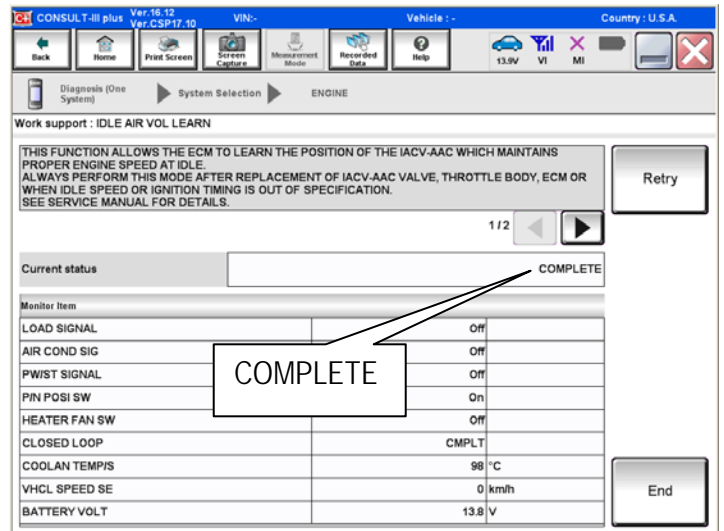


Figure 5

For 2005 and Later MY Vehicles ONLY: Enter VIN into New Service Replacement ECM

5. Enter the VIN into the new service replacement ECM as follows:

- a. Select "Diagnosis (One System)", "ENGINE", "Work support" and "VIN REGISTRATION". See Figure 6.

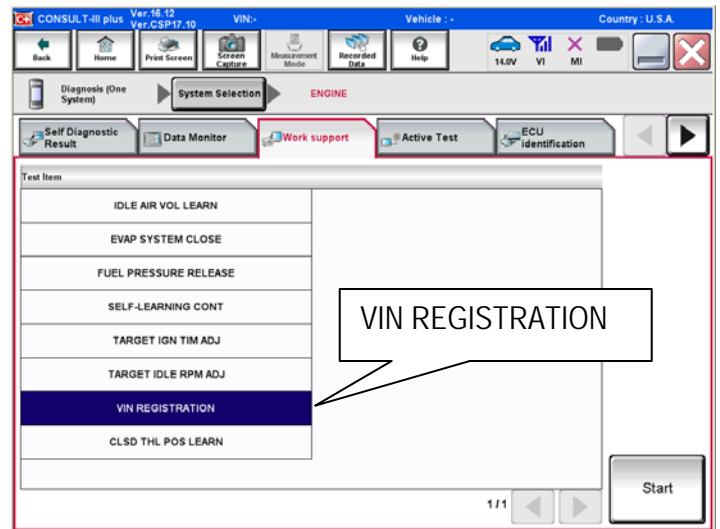


Figure 6

- b. Enter the vehicle VIN in both the VIN (1ST TIME) and VIN (2ND TIME) boxes, then select Start. See Figure 7.

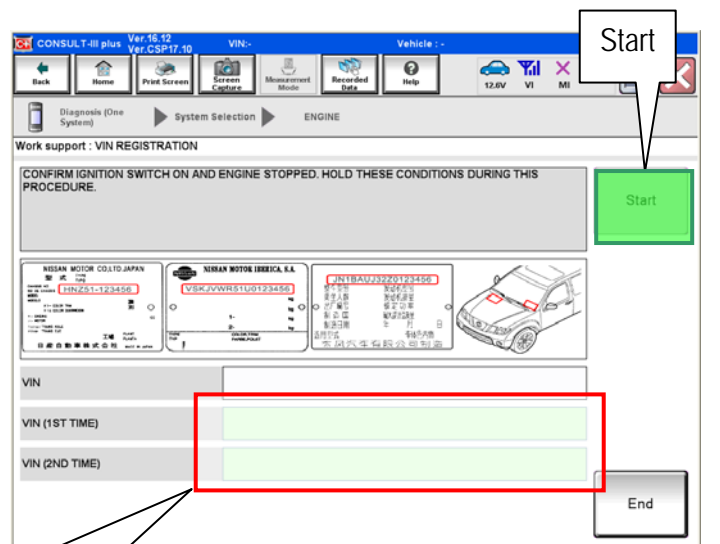


Figure 7

- c. Once completed (COMAND SUCCEEDED; See Figure 8) turn the ignition off for 10 seconds, then back on and check for any DTCs.
- d. Select "READ VIN" and confirm that the VIN is correct.
 - If VIN does not display it can also be checked through the "RE/programming, Configuration" tab.

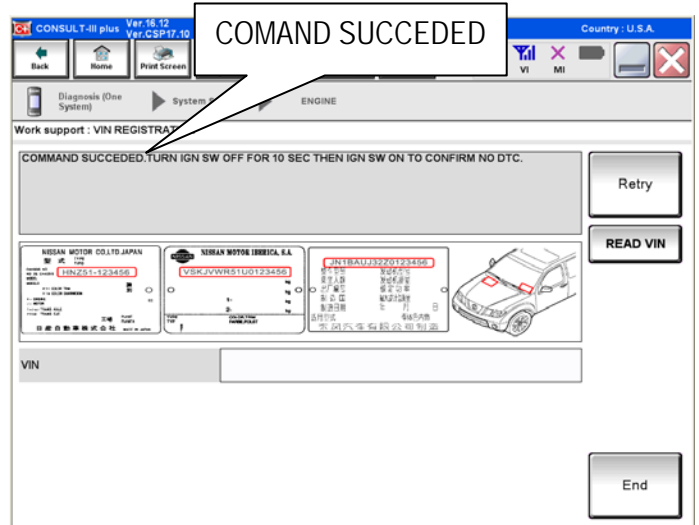


Figure 8

Check for ECM Updates

- 6. Check and confirm that ECM is updated to most recent part number and perform reprogram procedure if not most current.
 - Select and use the reprogramming option that **does not** have the message "Caution! Use ONLY with NTBXX-XXX".
 - If you are not familiar with checking for an ECM update or with the reprogramming procedure [click here](#). This will link you to the C-III plus "ECM Reprogramming general procedure".
 - If an update is not listed and a blank screen is displayed (see figure 9), a reprogram is not available for the ECM.

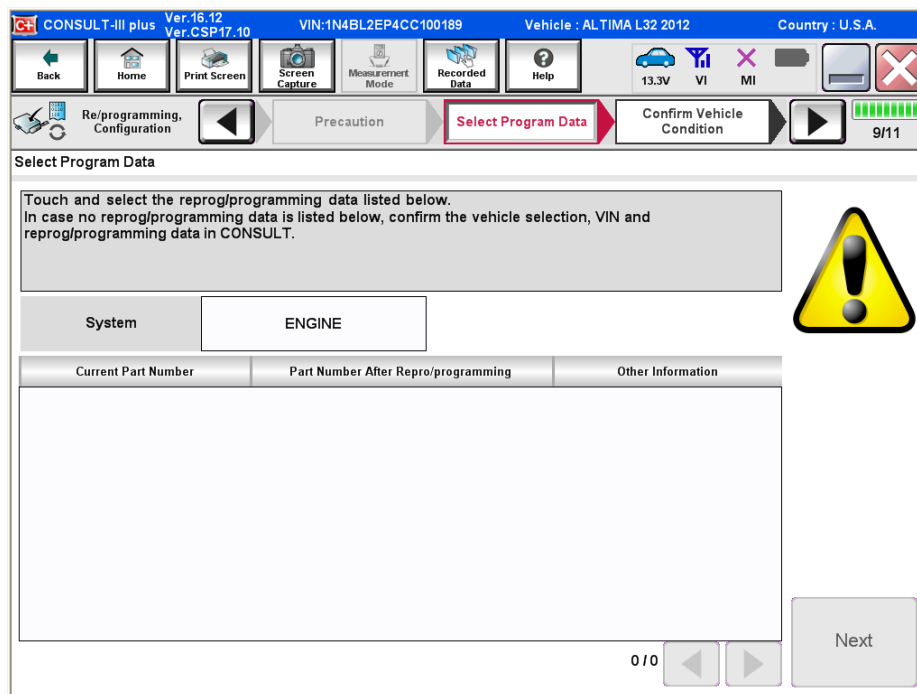


Figure 9