

EC12-023a

SERVICE BULLETIN

NTB12-091a

January 13, 2014

Date:

PROGRAMMING PROCEDURE FOR BLANK ECMs

This bulletin has been amended. Several changes have been made. Please discard previous versions of this bulletin.

APPLIED VEHICLES: All Nissan vehicles using replacement "Blank" ECMs

SERVICE INFORMATION

Replacement Engine Control Modules (ECMs) for many newer Nissan vehicles are now "Blank" ECMs.

Blank ECMs come <u>without</u> software and must be programmed (not <u>reprogrammed</u>) before they will function.

When ordering a replacement ECM, the electronic parts catalog (FAST or equivalent) will list the part number for a Blank ECM if it is available for the vehicle you are working on.

- All 2014 and newer M/Y vehicles, that use an ECM, have Blank ECMs available as replacements.
- Blank replacement ECMs are being phased in for 2013 to 2009 vehicles.

This bulletin contains details for:

- Saving / copying information from the old/current ECM and applying it to the new/replacement Blank ECM.
- Obtaining and installing program information into the new/replacement Blank ECM when it cannot be copied from the old/current ECM.

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

Blank ECM Programming Procedure (summary)

Below is a summary of the steps for Blank ECM programming. For details, go to page 3.

For vehicles where the ECM can be accessed (ECM P/N can be read) with C-III plus:

- a. Connect and launch C-III plus:
 - From the C-III plus home page, Select **Re/Programming, Configuration**.
 - Proceed to Re/programming.
 - Select **Programming** (not reprogramming).
- b. Select Before ECM Replacement.
- c. Save the current ECM P/N and VIN.
- d. Replace the ECM with the new Blank ECM.
- e. Select Programming.
- f. Select After ECM Replacement.
- g. Select Program ECM.
- h. Once programming has completed, perform Throttle Valve Closed Position, Idle Air Volume Learn (IAVL), Accelerator Closed Position, and DTC erase.
- i. Verify the VIN is registered.
- j. Close C-III plus.

For vehicles where the old/current ECM <u>cannot</u> be accessed (ECM P/N cannot be read) with C-III plus:

- a. Obtain the ECM software P/N by using the VIN in the electronic parts catalog. When using the VIN, the parts catalog will display both the Blank ECM part number and the part number for the software program.
- b. Install the replacement Blank ECM in the vehicle.
- c. Connect C-III plus, and then get to the screen that shows the selection Programming and select **Programming**.
- d. Select After ECM Replacement.
- e. Type in the VIN.
- f. Select the P/N from the list that matches the one taken from the parts catalog.
 - > <u>Double-check and make sure</u> the correct P/N has been selected.
 - Confirm that the description matches the vehicle's system applications i.e. ABS, CVT, ASCD, etc.
- g. Select **Program ECM**.
- h. Once programming has completed, perform Throttle Valve Closed Position, Idle Air Volume Learn (IAVL), Accelerator Closed Position, and DTC erase.
- i. Verify the VIN is registered.
- j. Close C-III plus.

Blank ECM Programming Procedure (details)

NOTE:

- <u>Always</u> enter the VIN into the Nissan electronic parts catalog (FAST or equivalent), when ordering (looking up) a replacement ECM.
- The first five digits of a replacement Blank ECM's P/N will start with 23703-xxxxx.
- Do not replace/install the new ECM until told to do so in the Service Procedure.

Can the old/current ECM (the one that will be replaced) be accessed with C-III plus?

NOTE: To determine if the old/current ECM can be accessed with C-III plus: Select Diagnosis (One System) > Engine, and then read the ECM Part number. Can the ECM part number be accessed and read?

YES – go to <u>Program Blank ECM (When ECM is Accessible With C-III plus)</u> on the **next page**.

If the vehicle's old/current ECM can be accessed with C-III plus, its current internal Part Number (P/N) and Vehicle Identification Number (VIN) can be saved and then applied to the Blank ECM.

NO – go to Program Blank ECM (When ECM is not Accessible With C-III plus) on page 18.

If the vehicle's old/current ECM <u>cannot</u> be accessed with C-III plus, the software program P/N to be programmed into the Blank ECM will need to be determined by entering the VIN into the Electronic Parts Catalog (FAST or equivalent). When using the VIN, the parts catalog will display both the Blank ECM part number and the part number for the software program.

PROGRAM BLANK ECM (When ECM is Accessible With C-III plus)

NOTE:

- Do not replace/install the new ECM until told to do so in the Service Procedure.
- Use this procedure if the vehicle's old/current ECM <u>can be</u> accessed with CONSULT-III plus.

IMPORTANT: Before starting the program procedure, make sure:

- ASIST on the CONSULT PC has been freshly synchronized (updated).
- All C-III plus software updates (if any) have been installed.

NOTE: The CONSULT PC automatically gets applicable ECM programming data during ASIST synchronization.

- A screen print for Warranty documentation can be done from the CONSULT PC during this process while still connected to the vehicle.
- <u>If possible</u>, take the vehicle for a 10 minute drive in order to meet the following conditions:
 - Engine coolant temperature: 70 100°C (158 – 212°F)
 - Battery voltage: More than 12.9V (At idle)
 - Transmission: Warmed up



Figure A

NOTE:

• After programming is complete, you will be required to perform Throttle Valve Closed Position, Idle Air Volume Learn (IAVL), Accelerator Closed Position, and DTC erase. The above conditions are required for the IAVL to complete.

- 1. Connect the C-III plus Vehicle Interface (plus VI) to the vehicle.
 - Make sure to use the correct VI for C-III plus (plus VI).

CAUTION: Make sure the plus VI is securely connected to the DLC. If the plus VI connection is loose during programming, the process will be interrupted and the **ECM may be damaged.**

2. Connect the AC Adapter to the CONSULT PC.

CAUTION: Be sure to connect the AC Adapter. If the CONSULT PC battery voltage drops during programming, the process will be interrupted and the **ECM may be damaged**.

3. Connect a battery charger to the vehicle battery:

• Set the battery charger at a low charge rate.

NOTE: The GR-8 (Battery and Electrical Diagnostic Station) set to "Power Supply" mode is recommended.

CAUTION: Be sure the battery charger is connected securely to the battery. Make sure the battery voltage stays between <u>12.0V and 15.5V</u> during programming. If the battery voltage goes out of this range during programming, the **ECM may be damaged**.

4. Turn off all external Bluetooth[®] devices (e.g., cell phones, printers, etc.) within range of the CONSULT PC and the VI.

CAUTION: Make sure to turn off all external Bluetooth[®] devices. If Bluetooth[®] signal waves are within range of the CONSULT PC and the plus VI during programming, programming may be interrupted and the **ECM may be damaged**.

- 5. Turn the ignition ON (engine OFF / Not Ready).
 - The engine must not start or run during the reprogramming procedure.
- 6. Turn OFF all vehicle electrical loads such as exterior lights, interior lights, HVAC, blower, rear defogger, audio, NAVI, seat heater, steering wheel heater, etc.

IMPORTANT: Make sure to turn OFF all vehicle electrical loads. Make sure the battery voltage stays between <u>12.0V and 15.5V</u> during programming. If the battery voltage goes out of this range during programming, the **ECM may be damaged**.

- 7. Open / start C-III plus.
 - You will be accessing the old/current ECM.
- 8. Wait for the plus VI to be recognized.
 - The serial number will display when the plus VI is recognized.

	CONSU	LT-mpius ver.viz	.12.00 VIN		venicie		Country . O.S.A.
	Back	Home Print S	Screen Capture Mode	Recorde Data	ed Help	11.8V VI	× • • • •
	Connee	ction Status -			Diagnosis Men	u	
plus VI is		Serial No.	Status		Diagno	sis (One Sy	/stem)
recognized		2300727	Normal Mode/Wireless	;	Diagno	osis (All Sys	stems)
	мі	-	\bigotimes				
			No connection		Selprog	gramming,	Configuration
	S.S.	Select VI/MI			Immob	ilizer	
		tion Setting	ABC Language Settin	g	Mainte	nance	
	\$? '	VDR					
				Figui	re 1		

9. Select Re/programming, Configuration.

Back	Home	Screen Capture Mode	orded Help 11.8V VI MI
Connec	ction Status -		Diagnosis Menu
	Serial No.	Status	Diagnosis (One System)
vi	2300727	Dormal Mode/Wireless connection	Diagnosis (All Systems)
м	-	No connection	Re/programming, Configuration
	Select VI/M	1	Immobilizer
	tion Setting	Language Setting	Maintenance
	VDR		

Figure 2

- 10. Use arrows (if needed) to view and read all precautions.
- 11. Check the box confirming the precautions have been read.
- 12. Select Next.

	Back Home Print Screen Capture Meensternert Gapture Meensternert Capture Meensternert Screen Capture Meensternert Model	
1	Re/programming, Configuration	
	Precaution	
	Operating suggestions for reprogramming, programming and C/U configration: Please review the all of precautions, and click the "Confirm" check box after confirming the its points. And touch "Next".	
	Caution: 1. Follow the operation guide displayed on screen. 2. "Back" and "Home" button may not be used on this flow. -For reprogramming and programming 1. Install the latest version of the CONSULT-III plus sortware, reprogramming/programming data to this CONSULT-III plus PC. 2. Preparation and read the service manual or reprogramming procedure sheet.	
Step	-For ECU Configuration 1. Need to write the configuration data to new ECU, after replace it. 2. If writing the wrong configuration data, ECU can not work. Please write the right data. -For ECU Configuration using manual mode 10	
11	Confirm the vehicle's spec and its configuration spec, following the service manual. If writing the wrong configuration data, ECU can not work. Please write the right data. 2. Operate the saving completely. Do not abort without saving data.	Step
	Confirmed instructions	12

Figure 3

13. Select Nissan, Vehicle Name, and then the correct Model Year.

• If the screen in Figure 4 does not display, skip to step 14.

	Back Re/programm Configuration	Print Screen Captu	nre Measurement R Mode R	Vehicle Selection	Vehicle Confirmation	
	Automatic S	election(VIN)	Manual Selec	tion(Vehicle Name)	$\mathbf{)}$	
Step	Vehicle Name :				Model Year :	Sales Channel
13	*MURANO Camp:P8201	JUKE	QUEST			NISSAN
	350Z	LEAF	ROGUE		Step	
	370Z	MAXIMA	SENTRA		13	
	370Z Convertible	мц	N			
	ALTIMA		nple			
	ALTIMA Hybrid	NISSAN GT-R	VERSA Hatchback			
	ARMADA	NV	VERSA Sedan			
	CUBE	PATHFINDER	XTERRA			CLEAR
	FRONTIER	PATHFINDER ARMADA	X-TRAIL			Calaat
				1/1	0/0	Select

Figure 4

14. Make sure **VIN or Chassis #** matches the vehicle's VIN.

15. If the correct VIN is displayed, select **Confirm**.

Step 14		Image: Constrained Mode Image: Constrained Method Image: Constrained Method Image: Constrained Method Incle Selection Vehicle Confirmation Souch "Confirm". In case you want to select another vehicle,	
2	VIN or Chassis #		
	Vehicle Name :	∎37∎Z	
	Model Year	2 2 00	
		1/1]
		Step 15	Change
		Figure 5	

16. Select Confirm.

Back Firme	t Screen Capture	Measurement Mode	e Help	(11.8V VI	<mark>х —</mark> (
Re/programming, Configuration	Vehicle Co	Ir	iput VIN	System Select	ion	4/6
Input VIN						
Enter the VIN number, an According to this operatio CONSULT, VIN number yo	n, in case of specifie					
	-123456 VSKJVWR511	14 15 15 15 15 15 15 15 15 15 15		6		
VIN (17 or 18 digits)		CM9#0#14				
				Step 16		Confirm

Figure 6

17. Select ENGINE.

Back Rome Print Screen Capture	Meanarement Mode	
Configuration	Input VIN System Selection	Operation Selection 5/6
System Selection		
Touch "system". In case ECU you want to operate is not list	ed below, the vehicle or model year might	be selected wrong.
	Step 17	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
ENGINE	METER/M&A	HVAC
MULTI AV	ВСМ	TRANSMISSION
ABS	CAN GATEWAY	
IPDM E/R	EV/HEV	
HEAD LAMP LEVELIZER	AIR BAG	
		1/1

Figure 7

NOTE: If the old/current ECM <u>cannot</u> be accessed with C-III plus, go to <u>Program</u> <u>Blank ECM (When ECM is not Accessible With C-III plus)</u> on page 18.

18. Select **Programming**. (Do not select Reprogramming.)

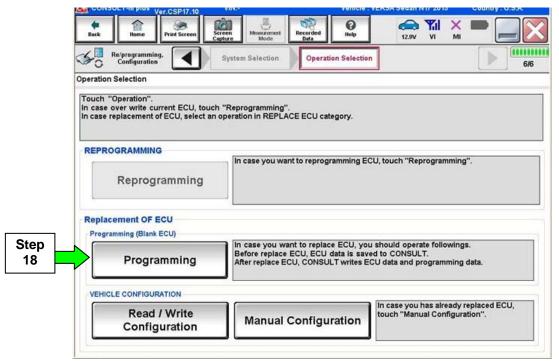


Figure 8

19. Select Before Replace ECU.

	Image: Back Imag
	Confirmation of Replace ECU
Step 19	Read following instruction, and touch "Before Replace ECU" or "After Replace ECU". In case ECU has NOT been replaced yet, back to Home Screen and replace ECU with Service Manual. Service Manual. Touch "Before Replace ECU" to back to Home Screen.
	After Replace ECU

Figure 9

20. Select Save.

Ver.CSP16.11		Common
Back Borne Print Screen Capture	Measurement Mode Recorded Data	-
	firmation of place ECU	9/9
Save ECU Data		
	e current part number as listed below to CONSULT. n by selecting suitable operation log. Operation log is erased	
File Label	i ⊯1,∰	
Operation	Programming (Blank ECU)	
System	ENGINE	
Part Number	■ 2 0 7 19 -1 9 A 0 C ■	
Vehicle	F#5J8KE(2WD)	-
VIN	I i≡ 5∎	1
Date	20年2月第1日 1日:0日:2日 20日 20日 20日 20日 20日 20日 20日 20日 20日 20日	Save
		Cave

Figure 10

21. Select Next.

Ver.CSP16.11		Common
Back Home Print Screen Capture	Measurement Mode Data Pepp	
	nfirmation of Save ECU Data	9/9
Save ECU Data		
"Next" and replace ECU.	need to be saved, not all) have been saved to CONSULT. Touch art from suitable operation by selecting this operation log.	
File Label		
Operation	Programming (Blank ECU)	-
System	ENGINE	
Part Number	37 0 0 K 0 4 0	
Vehicle	₽15,3₽ < ₩ (2)₩D #	-
VIN	E 1 E]
Date	∎01@0@22@19205@270 Step 21	Next
,	E '	

Figure 11

22. Make sure the VIN in the Saved Data List (Figure 12) matches the vehicle's VIN.

• If the VIN is not correct, select Delete and then start over from the C-III plus Home screen.

23. If the VIN is correct, select **Confirm**.

• This step will save the vehicle's existing ECM information.

Ver.CSP17.10	SULLS-	Venicie - VENSA Sedan (117 2010	country or star
Back Bone Print Screen	Screen Capture Mode Record	led Help 13.1V VI M	
Configuration	Vehicle Confirmation	Operation Log Selection	
Operation Log Selection			
	data from CONSULT to vehicle detail (right side). If the detail	figuration. • ECU, touch and select the data in Save is OK, and touch "Confirm". In case yo	
Saved Data List	Saved Data Detail		
	Operation	Programming (Blank ECU)	
	System	ENGINE	
	Part Number	26710-9464.88	
	Vehicle	VERGA Sedan	Delete
	Vehicle VIN	₩28786A Sedan =31411CH774/POB/E002857	Other
		#3N/1CN7%/P00/202054	Other

Figure 12

24. After **Confirm** is selected in step 23, the screen in Figure 13 will display.

Back	Home Print Screen	Screen Capture	Recorded Data	12.9V VI	× 🗭 📃 🖗
Re	/programming, Configuration	System Selection	Operation Selection		64
eration S	election				
n case ov		ouch "Reprogramming". t an operation in REPLA(CE ECU category.		
REPROG	RAMMING		t to reprogramming ECU	touch "Penrograms	lina"
	Reprogramming		in to reprogramming 200	, touch Reprogramm	mig .
	ment OF ECU				
	Programming	Before replace I	nt to replace ECU, you s ECU, ECU data is saved U, CONSULT writes ECU	to CONSULT.	
VEHICLE	CONFIGURATION		ولي		

Figure 13

25. Replace the ECM now:

- Leave C-III plus turned ON (it should continue to display the screen in Figure 13 while replacing the ECM).
- Make sure the CONSULT PC A/C power supply is connected.
- Turn the ignition OFF.
- Refer to the appropriate Service Manual for ECM replacement information.

26. After the ECM has been replaced (Blank ECM is now installed).

- a. Turn the ignition ON (engine OFF / Not Ready).
 - The engine must not start during the programming procedure.
- b. Make sure the GR8 / battery charger is connected.

27. Select Programming.

ſ

	CONSULT-III plus Ver.23.13 VIN:- Vehicle : VERSA Sedan N17 2013 Country : U.S.A.
	Image: Section Back Print Screen Image: Screen Cepture Monor Mode Recorded Back Image: Screen Cepture Image: Screen Cepture
	Re/programming. System Selection Operation Selection
	Operation Selection
	Touch "Operation". In case over write current ECU, touch "Reprogramming". In case replacement of ECU, select an operation in REPLACE ECU category.
	REPROGRAMMING
	Reprogramming
	Replacement OF ECU
	Programming (Blank ECU)
Step 27	Programming In case you want to replace ECU, you should operate followings. Before replace ECU, ECU data is saved to CONSULT. After replace ECU, CONSULT writes ECU data and programming data.
	VEHICLE CONFIGURATION
	Read / Write Configuration Manual Configuration

Figure 14

28. Select After Replace ECU.

	VertoSP1710 Back Print Screen Back Print Screen Screen Massarement Configuration Operation Log Configuration Configuration
	Confirmation of Replace ECU Read following instruction, and touch "Before Replace ECU" or "After Replace ECU".
	In case ECU has NOT been replaced yet, back to Home Screen and replace ECU with Service Manual. Touch "Before Replace ECU" to back to Home Screen. ECU
Step 28	After Replace ECU
	F ',, 4 5

Figure 15

- 29. Use arrows to view and read all precautions.
- 30. Check the box confirming the precautions have been read.
- 31. Select Next.

		5702 234 2010 Country , 0.3.A.
	Image: Back Image: Back <thimage: back<="" th=""> <thimage: back<="" th=""></thimage:></thimage:>	12.1V VI MI
	Configuration	Select Program Data
	Precaution	
	Operating suggestions: If the reprogramming/programming is unsuccessful, ECU software may be dama; usable. Please review the all of precautions, and click the "Confirm" check box after con	
	4. DO NOT set the A/C timer or A/C remote control system.	
	<during reprogramming=""> Never touch the CONSULT-III plus components to prevent cable disconnection</during>	
	Never depress the brake pedal or turn the steering wheel. Never open each door or trunk rid.	
		Step
Step		29
30		
		Step
2		Next 31
	Confirmed instructions	2/2
	Figure 16	
	Figure 16	

- 32. Make sure **OK** is highlighted **green** (battery voltage must be between **12.0 and 15.5 Volts**).
- 33. Select Next.

IMPORTANT: Battery voltage must stay between **12.0 and 15.5 Volts** during programming or ECM programming may be interrupted and the <u>ECM may be damaged</u>.

Back Image: Paint Screen Image: Scre	
Operate according to the following procedures.	Monitor battery voltage here
Remove the terminal caps of battery, and connect battery charger to battery.	
2 Adjust the battery charger output so that the vehicle battery voltage is between 12.0V and 13.5V. The vehicle battery voltage is shown on the top-right of this screen	
Confirm the RESULT is OK, touch "Next".	Next Step
Result OK	Next 33

Figure 17

NOTE: In the next step, the programming process will begin when Start is selected.

CAUTION: DO NOT stop programming after selecting Start, doing so may damage the ECM. Allow programming to complete.

34. Select Start.

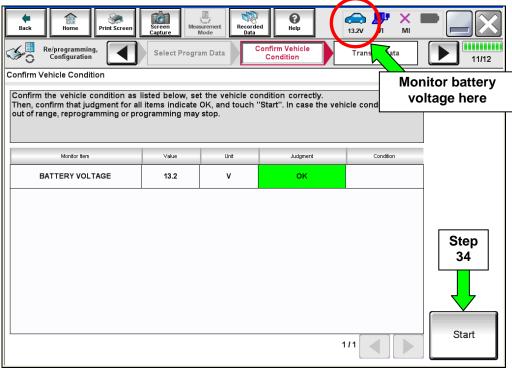


Figure 18

35. Wait for both progress bars to complete.

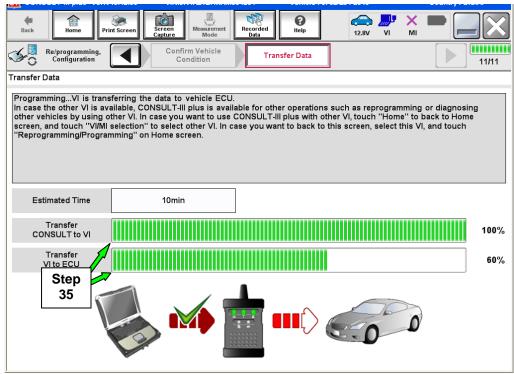


Figure 19

36. When the screen in Figure 20 displays, programming is complete.

NOTE: If the screen in Figure 20 does <u>not</u> display (programming does <u>not</u> complete), refer to the information on the next page.

37. Disconnect the GR8 / battery charger from the vehicle.

38. Select Next.

		10.12.00	-			Venicle . or oz i	2010		country . 0.5.A.
H Back	Home	Print Screen	Screen Capture	Measurement Mode	Recorded Data	O Help	12.8V VI	X I MI	
1	Re/programmin Configuration	ng, 🚺	Tran	sfer Data	Conf	irm Result			12/12
Confirm F	Result								
Reprog Touch	ramming or ; 'Next'' to coni	orogramming tinue operatio	i is complet	ed.					
						00			
							Step 38		Next
				F	igure 2	20			

39. Go to After Programming has Completed on page 33.

NOTE: Additional steps / operations are required before C-III plus will provide the final programming confirmation report. Go to **After Programming has Completed** on page 33.

If programming does <u>not</u> complete and the "!?" symbol displays as shown in Figure 21:

- Check battery voltage (12.0 15.5V).
- The ignition is ON and the engine is OFF.
- External Bluetooth[®] devices are OFF.
- All electrical loads are OFF.
- Select <u>Retry</u> and follow the on screen instructions.

NOTE: Retry may not go through on the first attempt. It can be selected more than once.

Rack Rome Print Screen Capture	Monarement Mode Mode Mode	-					
Configuration	Insfer Data Confirm Result	9/9					
Confirm Result							
Reprogramming or programming is not completed properly, but you can retry reprog/programming operation on this ECU. Touch "Retry" to retry reprogramming or programming.							
Part number after Reprog/programming	£9890						
Current Part Number	29380						
Vehicle	■ZE0LE/# ⁻¹						
VIN	UN14.30 G Pg G Tababaca						
System	TRUE MATKIN						
Date	1/26/20 xx 4:34:55 PM	Retry					
Other Information	6.26=>6.27						
Error Code	RNDS_CAN_ALL_SC003-5=NR	Print					

Figure 21

If programming does <u>not</u> complete and the "X" symbol displays as shown in Figure 22:

- Do not disconnect the plus VI or shut down C-III plus if reprogramming does not complete.
- Check battery voltage (12.0 15.5V).
- The CONSULT A/C adapter is plugged in.
- The ignition is ON and the engine is OFF.
- The 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 then restart the program procedure from the beginning.

CONSULT-III plus Ver.V14.21.00 VIN	:- Vehicle : -	Country : U.S.A.						
Beck Bome Print Screen Screen	Messarerret Mosererret Model Data	X 🖿 🔜 🔀						
Configuration	ansfer Data	2/2						
Confirm Result								
Reprogramming or programming is not completed properly. ECU has been broken, and impossible to reuse anymore. Touch "Home" to back to Home Screen, replace ECU with Service Manual.								
Part number after Reprog/programming	£8380-= = = _							
Current Part Number	89680======							
Vehicle	EBOBBA							
VIN	BNH A28 OF \$ DT \$1\$ \$25							
System	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX							
Date	1/26/20XX 4:29:18 PM							
Other Information	6.26=>6.27							
Error Code		Print						
L	1							

Figure 22

PROGRAM BLANK ECM (When ECM is not Accessible With C-III plus)

NOTE: Use this procedure if the vehicle's old/current ECM <u>cannot be</u> accessed with CONSULT-III plus.

IMPORTANT: Before starting the program procedure, make sure:

- ASIST on the CONSULT PC has been freshly synchronized (updated).
- All C-III plus software updates (if any) have been installed.

NOTE: The CONSULT PC automatically gets applicable ECM programming data during ASIST synchronization.

- A screen print for Warranty documentation can be done from the CONSULT PC during this process while still connected to the vehicle.
- <u>If possible</u>, take the vehicle for a 10 minute drive in order to meet the following conditions:
 - Engine coolant temperature: 70 100°C (158 – 212°F)
 - Battery voltage: More than 12.9V (At idle)
 - Transmission: Warmed up



Figure B

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

1. Install the new "Blank" ECM now.

- Refer to the appropriate Service Manual for ESM replacement information.
- 2. Determine the <u>software program part number</u> that will be used during the programming operation as follows:
 - a. Go to your Nissan electronic parts catalog (FAST or equivalent).

NOTE: FAST sample screens are shown in the next few steps. Other brand electronic catalogs may view and operate differently.

- b. Enter the VIN of the vehicle being repaired.
 - Always enter the VIN.
- c. Select OK.

MFA010 Nissan FAST for Windo Step		
File Search Tool Help 2b		
	ABC 🕼 🗊 🕼 🗊 🖉	
VIN-Code Model Series Prod.M/Y	Model Color :# Int.Color	Step 2c
Part Code Qty	A Part No	New Delete
No Part Code Qty Pa	art Number Description	Per Veh
Sec. Alternate Part I/C Me	mo Spec SUP APS. TSB	
Items 0 INPUT VIN CODE, MODEL OR MODEL SE	RIES. USE TAB KEY TO MOVE	9/7/2012 3:12 PM

Figure 1a

d. Select SEC.

Image: NFA010 Nissan FAST for Windows [1] 2d File Illustration Search Tool Abbreviations 1	X					
VIN-Code SN1ATENTEEC-750666 Model TBBALPETSEEUg US						
Model Series T32U Prod.M/Y 1013 Color :# K23 Int.Color G	1					
BODY ZROW ENGINE QR25DE DRIVE FWD AREA FED						
GRADE S TRANS CVT						
Part Code Qty Part No New Delete						
No Part Code Qty Part Number Description Per Veh						
Sec. Alternate Part I/C Memo Spec SUP APS. TSB-NO						
Example						
Items 0 ENTER AT LEAST 3 DIGITS FOR PARTCODE OR PARTNUMBER SEARCH 1/3/2014 10:31 AM						
Figure 2a	11.					

- e. Scroll down the list and select Sec-No 226, Description ENGINE CONTROL MODULE.
- f. Select the down arrow.
- g. Select OK.

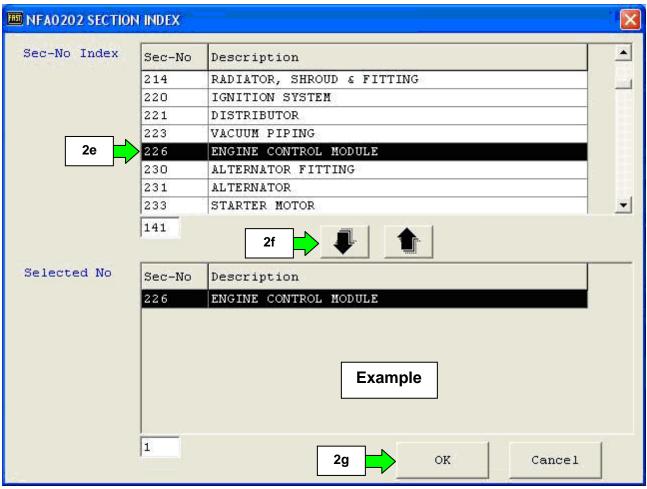


Figure 3a

- h. Click twice on the 23701 number.
 - After clicking twice the number should highlight in red. If another P/N is clicked, the first will change to green. <u>Green or Red</u> will make the P/N display in the P/N search in the next step.
- i. Select the P/No (part number) search button.

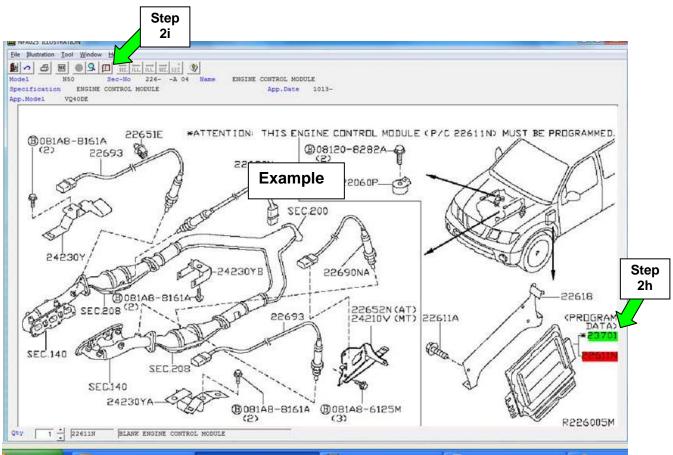


Figure 4a

- j. From the screen show in Figure 5a, write down the ECM software P/N listed for **ROM-DATA ID, ID NO FOR PROGRAMMING.**
 - The first five digits of this number are 23701-xxxxx.

NOTE: The last five digits are specific to the vehicle you are working on (based on the VIN), and are used to select the correct program in C-III plus later in this procedure.

<u>File Illustration Search Tool Abbreviations H</u> elp	
<u>₩</u> ₩ ⊆ = 8 © = = ∞ * * * 0 1 3 0 1 3 0 * *	
VIN-Code Model DIRCENNEGEURRE	US
Model Series N50 Prod.M/Y 1113 Color :# Int.Color	OK
BODY W ENGINE VQ40DE GRADE PRO-4X TRANS 5AT EMISSION FED DRIVE 4WD	
Part Code Qty A Part No New Delete	
No Part Step Qty Part Number Description Per V	eh
Sec. Alter: 2j I/C Memo Spec SUP APS. TSB-NO	
1 23701 1 23701-90JBA- ROM-DATA ID, ID NO FOR PROGROMMING E 01	
2 22611N 1 23703-9CF0A- BLANK ENGINE CONTROL MODULE 01 226 #E	
Example 2	

Figure 5a

- 3. Connect the C-III plus Vehicle Interface (plus VI) to the vehicle.
 - Make sure to use the correct VI for C-III plus (plus VI).

CAUTION: Make sure the plus VI is securly connected to the DLC. If the plus VI connection is loose during programming, the process will be interrupted and the **ECM may be damaged.**

4. Connect the AC Adapter to the CONSULT PC.

CAUTION: Be sure to connect the AC Adapter. If the CONSULT PC battery voltage drops during programming, the process will be interrupted and the **ECM may be damaged**.

5. Connect a battery charger to the vehicle battery:

• Set the battery charger at a low charge rate.

NOTE: The GR-8 (Battery and Electrical Diagnostic Station) set to "Power Supply" mode is recommended.

CAUTION: Be sure the battery charger is connected securely to the battery. Make sure the battery voltage stays between <u>12.0V and 15.5V</u> during programming. If the battery voltage goes out of this range during programming, the **ECM may be damaged**.

6. Turn off all external Bluetooth[®] devices (e.g., cell phones, printers, etc.) within range of the CONSULT PC and the VI.

CAUTION: Make sure to turn off all external Bluetooth[®] devices. If Bluetooth[®] signal waves are within range of the CONSULT PC and the plus VI during programming, programming may be interrupted and the **ECM may be damaged**.

- 7. Turn the ignition ON (engine OFF / Not Ready).
 - The engine must not start or run during the reprogramming procedure.
- 8. Turn OFF all vehicle electrical loads such as exterior lights, interior lights, HVAC, blower, rear defogger, audio, NAVI, seat heater, steering wheel heater, etc.

IMPORTANT: Make sure to turn OFF all vehicle electrical loads. Make sure the battery voltage stays between <u>12.0V and 15.5V</u> during programming. If the battery voltage goes out of this range during programming, the **ECM may be damaged**.

9. Open / start C-III plus.

10. Wait for the plus VI to be recognized.

• The serial number will display when the plus VI is recognized.

	CONSUL	T-III plus Ver.V12	12.00 VIN:-	Vehicle : -	Vehicle : - Country : U.S.A.			
	Back	Home Print S	Screen Capture Mode	Recorded Data	11.8V VI MI			
	Connect	tion Status –		Diagnosis N	Diagnosis Menu Diagnosis (One System)			
		Serial No.	Status	Diag				
plus VI is recognized		2300727	کرہ سک Normal Mode/Wireless connection		inosis (All Syste	ms)		
	МІ	-	No connection		programming, Co			
	Select VI/MI				obilizer			
		on Setting	Language Setting	n Mair	ntenance			
		DR						
<u> </u>			Fi	igure 6a				

11. Select **Re/programming, Configuration**.

	ULT-III plus Ver.V12	2.12.00 VIN:-	Vehicle : -	Country : U.S.A.			
Back	Home	Screen Capture Mode	Recorded Help 11.8V VI	I 🗙 🖿 📃 🔀			
Connection Status							
	Serial No.	Status	Diagnosis (One	System)			
VI VI	2300727						
	2300727	Normal Mode/Wireless connection	Diagnosis (All S	ystems)			
м		\bigcirc					
	-	No connection	Re/programming	Configuration	L Step		
				g, configuration			
F.S	Select VI/MI						
Applica	ation Setting						
SUB	Sub mode Sub mode Maintenance						
87	' VDR						
1					1		

Figure 7a

- 12. Use arrows to view and read <u>all</u> precautions.
- 13. Check the box confirming the precautions have been read.

NOTE: The box cannot be checked until all precautions in step 12 have been viewed and read.

14. Select Next.

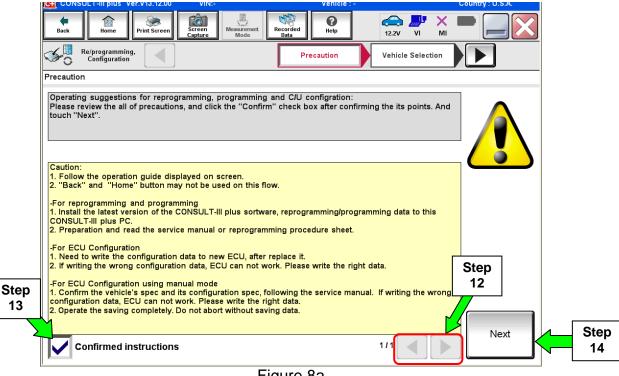


Figure 8a

15. Select Nissan, Vehicle Name, and then the correct Model Year.

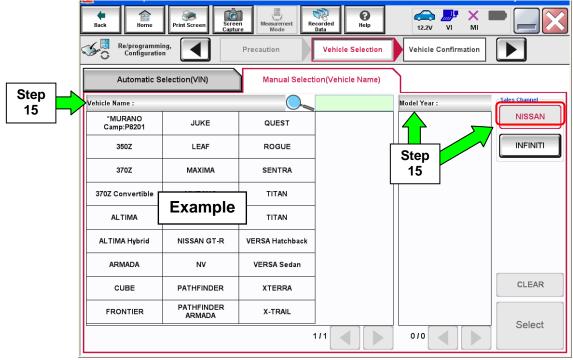


Figure 9a

16. Select **Programming**. (**Do not** select **Re**programming.)

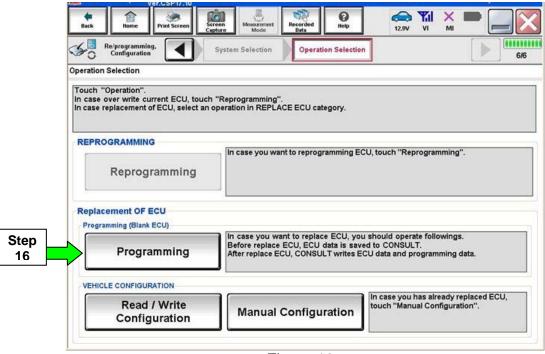


Figure 10a

17. Select After Replace ECU.

	SULT-III plus Ver.	CSP17.10 VIN	<u>.</u>	v	enicle : VERSA S	edan N17 201	s Country:	U.S.A.
Beck	Bome	int Screen Capture	Moissrement Mode		Help	13.1V VI	х 🖿 🖡	
50	Re/programming, Configuration		eration Log Selection	Confirmat Replace				5/5
Confirm	ation of Replace E	cu						
Read f	ollowing instruction	on, and touch "Befo	ore Replace ECU	' or "After Rep	place ECU".			
		In case	ECU has NOT be	en replaced ye	et, back to Hom	e Screen and	replace ECU wit	h
	Defens Deals	Touch "	Manual. Before Replace E	CU" to back t	o Home Screen			
	Before Repla ECU	ice						
		In case operation	ECU has already	replaced, touc	ch "After Replac	e ECU". CON	ISULT shows ne	xt
			n.					
Af	ter Replace	ECU						
			Fig	ure 11a	а			

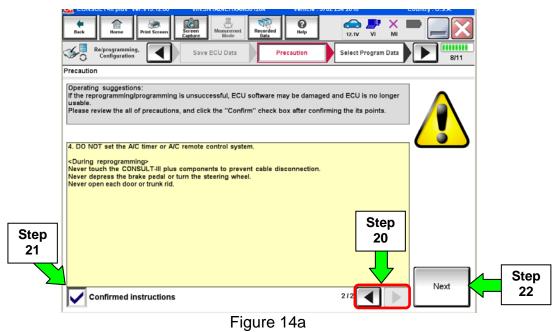
18. Type in the VIN, and then select **Confirm**.

	or this pice	Ver.CSP17.10	and a			venicie.	ALLINA Sedan ALL	2010	country, c	1000
e Back	Home	Print Screen	Screen Capture	Mossurement Mode	Recorded Data	() Help				
50'	Re/programmin Configuration	ng.	Vehicle	Confirmation	In	put VIN	System Se	election		4/6
nput VIN										
Accordin	ig to this op T, VIN numt	A REAL PROPERTY OF LEVEL AND A REAL PROPERTY OF LEVELAND A REAL PROPERTY OF LEVE	NISSAY S	ed operation file name. T	CHARACTER CO		CU information i umber correctly.	nto		
VIN (1	7 or 18 digit:	s) 38/1	C 1117 /11F		2050		Step 18		С.	onfirm
				Fi	gure 1	2a			<u> </u>	

19. Select the ECM software P/N that matches **the last 5 digits** of the P/N written down in step 2j on page 23, and then select **Next**.

	Select Program Data	Screen Screen Mode Screen Precaution og/programming data listed below, confin n CONSULT.		Condition	9/1 9/1
	System	ENGINE Part Number After Repr	5/programming	Other Information	
Step 19	xxxxx-xxxxx xxxxx-xxxxx	xxxxx-xxxxx xxxxx-xxxxx		*****	
				Step 19	Next
		FI	gure 13a		

- 20. Use arrows to view and read all precautions.
- 21. Check the box confirming the precautions have been read.
- 22. Select Next.



- 23. Make sure **OK** is highlighted **green** (battery voltage must be between **12.0 and 15.5 Volts**).
- 24. Select Next.

۱

IMPORTANT: Battery voltage must stay between **12.0 and 15.5 Volts** during programming or ECM programming may be interrupted and the ECM may be damaged.

Back Borne Print Scree	een Screen Measurement Recorded Data	Image: Second se			
Configuration	Select Program Data		10/11	-	
Operate according to the follow	wing procedures.		nitor batto oltage her		
1	f battery, and connect battery charger to battery	у.			J
Remove the terminal caps c					
Remove the terminal caps o					
2	utout so that the vehicle battery voltage is betw	veen 12.0V and			
2 Adjust the battery charger o	utput so that the vehicle battery voltage is betw oltage is shown on the top-right of this screen				
2 Adjust the battery charger o	oltage is shown on the top-right of this screen				

Figure 15a

NOTE: In the next step, the programming process will begin when Start is selected.

CAUTION: DO NOT stop programming after selecting Start. This may damage the ECM. Allow programming to complete.

25. Select Start.

Back Re/programming, Configuration Configuration	Select Progra	Am Data	ed Reip Heip Confirm Vehicle Condition	13.2V I MI Trans Cata	
Confirm the vehicle condition as Then, confirm that judgment for all out of range, reprogramming or pro	items indicate	OK, and touch '		VO	hitor battery Itage here
Monitor Item	Value 13.2	Unit V	Judgment	Condition	
					Step 25
			1		Start

Figure 16a

26. Wait for both progress bars to complete.

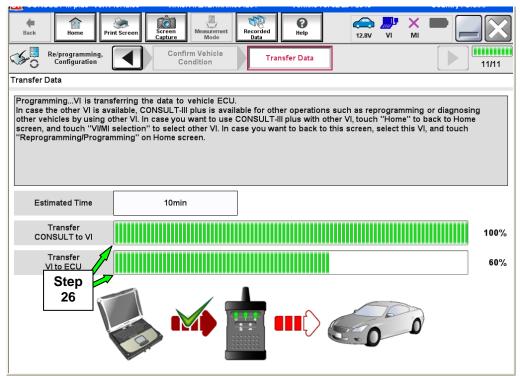


Figure 17a

27. When the screen in Figure 18a displays, programming is complete.

NOTE: If the screen in Figure 18a does <u>not</u> display (programming does <u>not</u> complete), refer to the information on the next page.

28. Disconnect the GR8 / battery charger from the vehicle.

29. Select Next.

CONSOL - III plus Ver. VI	0.12.00 VIN.0N IA24ETTAAIM	Venicle . 0702	204 20 10	oouniny . 0.5.A.
Back Home Print	Screen Capture Mode	Recorded Data	()	
Re/programming, Configuration	Transfer Data	Confirm Result		12/12
Confirm Result				
Reprogramming or progra Touch "Next" to continue o	amming is completed. operation.			
		0.0		
			Step 29	Next
	с:	auro 190		

Figure 18a

30. Go to After Programming has Completed on page 33.

NOTE: Additional steps / operations are required before C-III plus will provide the final programming confirmation report. Go to **After Programming has Completed** on page 33.

If programming does <u>not</u> complete and the "!?" symbol displays as shown in Figure 19a:

- Check battery voltage (12.0 15.5V).
- The ignition is ON and the engine is OFF.
- External Bluetooth[®] devices are OFF.
- All electrical loads are OFF.
- Select <u>Retry</u> and follow the on screen instructions.

NOTE: Retry may not go through on the first attempt. It can be selected more than once.

Back Borne Print Screen Cargon Canfiguration Configuration Tr Confirm Result	Measurent Mede Media Confirm Result	9/9
Reprogramming or programming is not co operation on this ECU. Touch "Retry" to retry reprogramming or pr	npieted properly, but you can retry reprog/programming ogramming.	
Part number after Reprog/programming	0000	
Current Part Number	26380	
Vehicle	=260L2/# ⁻¹	
VIN	UN14.30 GR _K G TICKCC	
System	FREE MATINES	
Date	1/26/20 xx 4:34:55 PM	Retry
Other Information	6.25=>6.27	
Error Code	RNDS_CAN_ALL_SC003-5=NR	Print

Figure 19a

If programming does \underline{not} complete and the "X" symbol displays as shown in Figure 21a:

- Do not disconnect the plus VI or shut down C-III plus if reprogramming does not complete.
- Check battery voltage (12.0 15.5V).
- The CONSULT A/C adapter is plugged in.
- The ignition is ON and the engine is OFF.
- The 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 then restart the program procedure from the beginning.

CONSULT-III plus Ver.V14.21.00 VIN:	- Vehicle : -	Country : U.S.A.
Home Screen Capture	Mess erroret Mode Recorded Data	
Configuration	Insfer Data	2/2
Confirm Result		
Reprogramming or programming is not con reuse anymore. Touch "Home" to back to Home Screen, rep	ipleted properly. ECU has been broken, and impossible to lace ECU with Service Manual.	
Part number after Reprog/programming	£9380	
Current Part Number	8880	
Vehicle	(CBO) BAN	
VIN	BNE AZBOFTEXEXE	
System	XIDDINRYCEDOX	
Date	1/26/20XX 4:29:18 PM	
Other Information	6.26=>6.27	
Error Code		Print

Figure 20a

After Programming has Completed

After completing ECM programming, the following steps are required before C-III plus will provide the final programming confirmation report:

- 1. Follow the C-III plus 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.

- 2. Verify the before and after part numbers are different (see Figure 21a).
- 3. Print a copy of this screen (Figure 21a) and attach it to the repair order.
- 4. Select **Confirm**.

Ver.CSP17.10	Venicie - VENSA Sevan IVII 2015	Country . O.S.A.
Back Print Screen	Measurement Mode Measurement	-
Re/programming, Configuration	se All DTCs Print Result / Operation Complete	19/19
Print Result / Operation Complete		
or touch "Screen Capture" to storage of this perform "Diagnosis (All Systems)" to confi	leted. Confirm LAN access, touch "Print" to print out this page, s page temporally. Touch "End" to back to Home Screen, and rm that no DTC is detected. ata Folder" on desk top, and open the folder named	
	23710 # KAGB	
Part number before Reprog/programming	23710-2480A =	
Vehicle	¢l117 lư/BiR®AuSedan	
VIN	and Chi7#ARD Tal GD 205#4	
System	ENGINE Step 3	Print
Date	≥/5#2012=10=4±:37 ≜M	
	1/1 Step 4	Confirm
1		

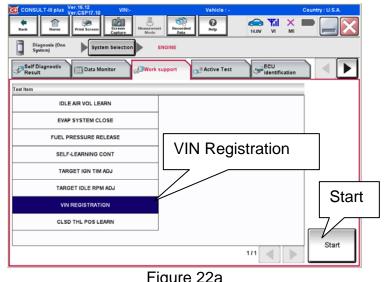
Figure 21a

NOTE: If you cannot print the above screen:

- a. Select Screen Capture.
- b. Name the file.
- c. Save the file in My Documents.
 - A copy of the screen is now saved in the CONSULT PC. It can be retrieved and printed at a later time.
- 5. Select Home and return to the C-III plus home screen.
- 6. Go to <u>Verify VIN is Registered</u> on the next page.

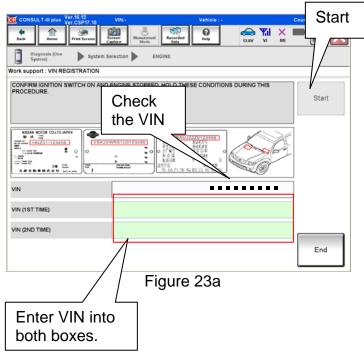
Verify VIN is registered

- Select Diagnosis (One System)
 > ENGINE > Work support > VIN Registration (see Figure 22a).
- 2. Select Start.



- 3. Check the VIN (see Figure 23a):
 - If the VIN matches the vehicle, the procedure is complete
 - If the VIN is blank or incorrect, continue to the next step.
- Enter the vehicle's VIN in both the boxes: VIN(1ST TIME) and VIN (2ND TIME)

SELF-LEARNING CONT TARGET IGLE RPM ADJ TARGET IGLE RPM ADJ VIN REGISTRATION CLSD THL POS LEARN 1/1 Start Figure 22a Figure 22a



5. Select Start

- When VIN registration is compete, COMMAND SUCCEEDED will display (see Figure 24a).
- 7. Turn the ignition OFF.
- 8. Wait 10 seconds.
- 9. Turn the ignition back ON.
- 10. Select "READ VIN" and confirm that the VIN is correct.

NOTE: If the VIN does not display, it can also be checked by selecting the "RE/programming, Configuration" on the Home screen.

- 11. Select Home and return to the C-III plus home screen.
- 12. Close C-III plus.
- 13. Turn the ignition OFF.
- 14 Disconnect the plus VI from the vehicle.
- 15. Test drive the vehicle to make sure it operates correctly.

Diagnosis (One) System ENGINE	
Work support : VIN REGISTRAT	
	Retry READ VIN
VIN	Read VIN
	End
Figure 24a	