

Classification: AT14-004b Reference:

ITB14-021b

SERVICE BULLETIN

COPYRIGHT© NISSAN NORTH AMERICA, INC. Date:

May 10, 2016

INFINITI; PROGRAMMING BLANK TCM

This bulletin has been amended. The Applied Vehicles have been updated and information/steps for obtaining a TCM software part number have been changed. Please discard all previous versions of this bulletin.

APPLIED VEHICLES:	2004-2010 QX56 (JA60)	2008-2010 EX35 (J50)
	2005-2006 Q45 (F50)	2003-2008 FX (S50)
	2007-2008 G35 Sedan (V36)	2006-2008 M35 (Y50)
	2008 G37 Coupe (V36)	2009-2010 M35 AWD Only (Y50)
	2005-2006 G35 Sedan (V35)	2006-2010 M45 (Y50)
	2005-2007 G35 Coupe (V35)	
	2004 G35 Coupe (V35) built after .	JNKCV54E(*)4M800001
	2004 G35 Sedan (V35) built after	JNKCV51 E(*)4M600001, or
		JNKCV51 F (*)4M700001

APPLIED TRANSMISSION: RWD 5 speed A/T

SERVICE INFORMATION

Replacement 5-speed rear wheel drive Automatic Transmission (A/T) assemblies and replacement control valves (valve bodies) now come with "blank" Transmission Control Modules (TCMs).

Blank TCMs come <u>without</u> software and must be programmed (not <u>reprogrammed</u>) and then configured after they are installed.

When ordering a replacement A/T or control valve, use the Infiniti electronic parts information systems to obtain the correct software program part number.

This bulletin contains details for:

- Saving and copying information from the old (current) TCM and applying it to the new (replacement) A/T assembly or valve body blank TCM
- Obtaining and installing program information into the new A/T assembly or new control valve blank TCM when it cannot be copied from the old TCM

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.

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

NOTE: Erase any stored DTCs and perform DTC related repairs before starting the programming procedure in this bulletin. Refer to ASIST and the ESM as needed.

For vehicles where the old/current TCM can be accessed (TCM 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 Replace ECU.
- c. Save the current TCM P/N and Vehicle Identification Number (VIN).
- d. Replace the 5-speed rear wheel drive A/T assembly or control valve with a new one that contains a blank TCM.
- e. Select vehicle model and year, and then select Confirm.
- f. Select After Replace ECU.
- g. Select Start (to begin programming).
- h. Once programming has completed, configure the new TCM and erase DTCs.
- i. Close C-III plus.

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

- a. Replace the 5-speed rear wheel drive A/T assembly or control valve with a new one that contains a blank TCM.
- b. Use the Infiniti electronic parts information systems to obtain the correct software program part number.
- c. Connect C-III plus, navigate to the screen that shows the selection **Programming**, and then select **Programming**.
- d. Select After Replace ECU.
- e. Select the P/N from the list that matches the one obtained from the electronic parts information systems.
 - > <u>Double-check and make sure</u> the correct P/N has been selected.
- f. Select Start (to begin programming).
- g. Once programming has completed, configure the new TCM and erase DTCs.
- h. Close C-III plus.

Blank TCM Programming Procedure (details)

NOTE:

- <u>Always</u> enter the VIN into the electronic parts catalog (FAST or equivalent), when ordering (looking up) a replacement A/T assembly or control valve.
- Do not replace/install the new A/T or control valve, with blank TCM, until told to do so in the SERVICE PROCEDURE.

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

NOTE: To determine if the old TCM can be accessed with C-III plus: Select **Diagnosis (One System)** > **Transmission**, and then read the TCM P/N. Can the TCM P/N be accessed and read?

YES – go to PROGRAM BLANK TCM (when old TCM is accessible with C-III plus) on the next page.

If the vehicle's old/current TCM can be accessed with C-III plus, its current internal P/N can be saved and then applied to the new blank TCM.

NO – go to PROGRAM BLANK TCM (when old TCM is NOT accessible with C-III plus) on page 22.

If the old/current TCM <u>cannot</u> be accessed with C-III plus, the software program P/N to be programmed into the blank TCM will need to be obtained using the Infiniti electronic parts information systems.

SERVICE PROCEDURE

PROGRAM BLANK TCM (when old TCM is accessible with C-III plus)

NOTE:

- Do not remove the old A/T or control valve until told to do so in the SERVICE PROCEDURE.
- Use this procedure if the vehicle's old/current TCM <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 TCM 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.

NOTE: After programming is complete, you will be required to perform A/T write configuration and DTC erase.

- 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 securly connected to the DLC. If the plus VI connection is loose during programming, the process will be interrupted and the **TCM 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 **TCM may be damaged**.

3. Connect a battery charger to the vehicle battery:

• GR-8 (Battery and Electrical Diagnostic Station) set to ECM power supply.

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 **TCM may be damaged**.

4. Turn OFF all external Bluetooth[®] devices (e.g., cell phones, printers, etc.) within range of the CONSULT PC and the plus 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 **TCM may be damaged**.

- 5. Turn the ignition ON (engine OFF).
 - The engine must not start or run during the programming procedure.
- 6. Turn OFF all vehicle electrical loads such as exterior lights, interior lights, HVAC, blower fan, 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 **TCM may be damaged**.

- 7. Open / start C-III plus.
 - You will be accessing the vehicle's old TCM.

NOTE: All C-III plus screens throughout this bulletin are examples. Actual C-III plus screens on your CONSULT PC may vary slightly.

- 8. Wait for the plus VI to be recognized.
 - The serial number will display when the plus VI is recognized.

	Back Home Print	t Screen Capture Mode Record	ied ? Help 11.8V VI MI
	Connection Status		Diagnosis Menu
Stop 9:	Sorial No.	Statue	Diagnosis (One System)
Step 8: plus VI is	VI 2300727	▶ >>)))	
recognized		Normal Mode/Wireless connection	Diagnosis (All Systems)
	мі -	\bigcirc	
		No connection	Re/programming, Configuration
	Select VI/M	I	Immobilizer
	Application Setting		
	Sub mode	ABC Language Setting	Maintenance
	VDR		
		Figu	re 1

9. Select Re/programming, Configuration.

Back	Home Print		orded ata
Connec	ction Status -		Diagnosis Menu
	Serial No.	Status	Diagnosis (One System)
VI	2300727	►>>>))) Normal Mode/Wireless connection	Diagnosis (All Systems)
MI	-	No connection	Re/programming, Configuration
8	Select VI/M	I	Immobilizer
	tion Setting	Language Setting	Maintenance
(1	VDR		



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

NOTE: The box cannot be checked until all precautions in step 10 have been viewed and read.

12. Select Next.

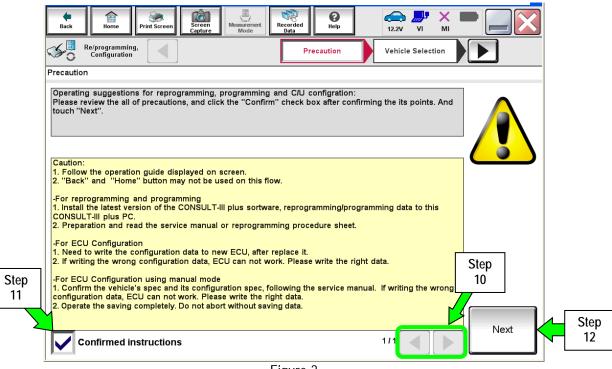


Figure 3

- 13. Select Infiniti, Vehicle Name, Model Year, and then Select.
 - If the screen in Figure 4 does not display, skip to step 14.

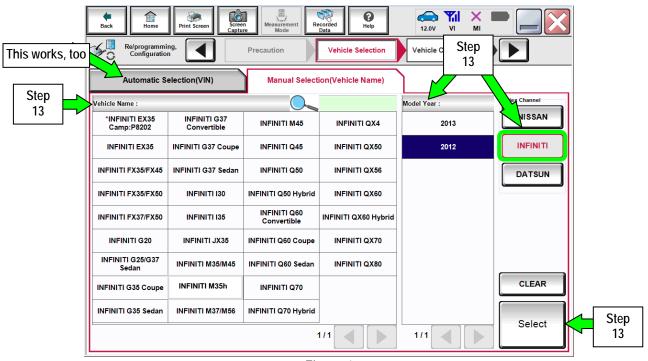


Figure 4

- 14. Make sure VIN or Chassis # matches the vehicle's VIN.
- 15. If the correct VIN is displayed, select Confirm.

		Image: Construction of the second decision of the second dec		
Step 14	VIN or Chassis # Vehicle Name :			
	Model Year	20XX		
		1/1	Change Confirm Step 15	

Figure 5

16. Select Confirm.

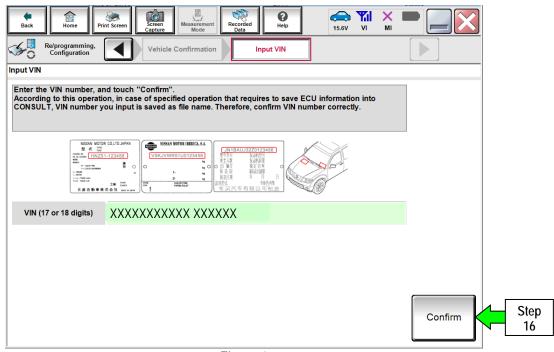


Figure 6

17. Select TRANSMISSION.

Back Image: Print Screen Image: Scre	Input VIN	Image: Wight of the second]
Touch "system". In case ECU you want to operate is not list	ed below, the vehicle or model year might i	be selected wrong.	
ENGINE	METER/M&A	HVAC	
MULTI AV	всм	TRANSMISSION	Step 17
ABS	CAN GATEWAY		`
IPDM E/R	EV/HEV		
HEAD LAMP LEVELIZER			
		1/1	

Figure 7

NOTE: If the old TCM <u>cannot</u> be accessed with C-III plus, go to page 22, <u>Program Blank ECM</u> (When ECM is NOT Accessible With C-III plus).

18. Select **Programming**. <u>Do not</u> select **Reprogramming**.

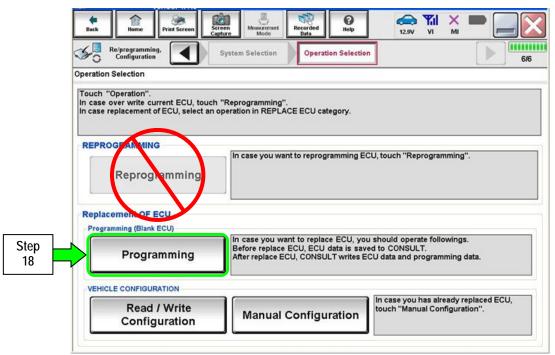


Figure 8

• If the screen in Figure 9 appears, select Next.

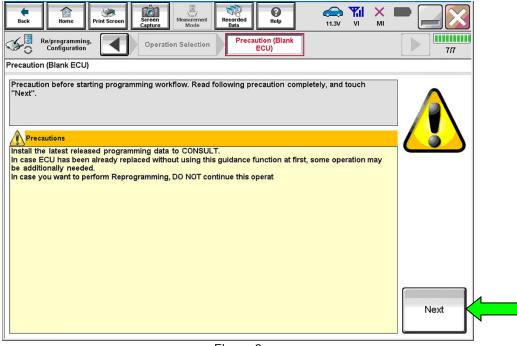
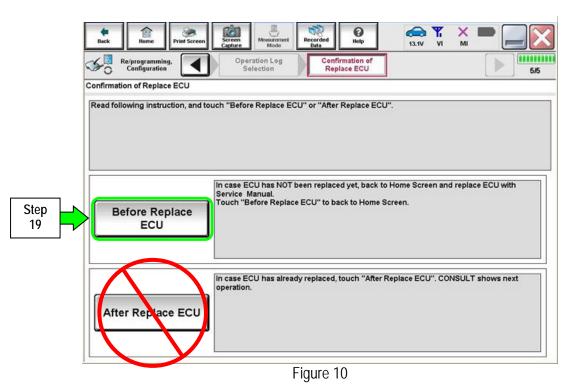


Figure 9

19. Select Before Replace ECU.



20. Select Save.

	Messrement Mode Mode Mode Mode Mode Mode Messrement Mode Messrement Mode Messrement Mode Messrement Mode Messrement Mode Messrement Mode Messrement Mode Messrement Mode Messrement Mode Messrement Mode Messrement Mode Messrement Mode Messrement Mode Messrement M	
	e current part number as listed below to CONSULT. n by selecting suitable operation log. Operation log is erased	
File Label	XXXXXXX	
Operation	Programming (Blank ECU)	
System	TRANSMISSION	
Part Number	31020-XXXXX	
Vehicle	XXXXXXX	
VIN	хххххх	
Date	2014/01/13 19:05:20	Save Step 20

Figure 11

21. Select Next.

Back Rome Print Screen Capture	Messurement Mode Mode Mode	12.5V			
	irmation of Save ECU Data			9/9	
ave ECU Data					
Operation log and ECU data (Some of ECU r 'Next'' and replace ECU. After replacement of ECU, operation can sta	· ·			eh and the second secon	
File Label	ххххххх				
Operation	Programming (Blant				
System	TRANSMISSION				
Part Number	31020-XXXXX				
/ehicle	ХХХХХХХ				
VIN	ХХХХХХХ				
Date	2014/01/13 19:05:3	5		Next	Ste
					2

Figure 12

- 22. Make sure the VIN in the Saved Data List (Figure 13) matches the vehicle's VIN.
 - If the VIN <u>is not</u> 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 TCM information.

Configuration	Vehicle Confirmation	Operation Log Selection	
Operation Log Selection			
In case you want to write the sa	the detail (right side). If the deta	nfiguration. le ECU, touch and select the data in Save il is OK, and touch "Confirm". In case you	
Saved Data List	Saved Data Detail		
	Operation	Programming (Blank ECU)	
	System	TRANSMISSION	
	Part Number	31020-XXXXX	
	Vehicle	хххххх	Delete
	VIN	*****	Other
	Saved Date	13/1/2014 7:06 PM	Operation

Figure 13

24. After **Confirm** is selected in step 23, the screen in Figure 14 will display. Select **Home**.

e Back	Home	Print Screen	Screen Capture	nt Recorded Data	() Help	12.9V VI	× I	•
≪₀ '	Re/pro umi Com nio	ng.	System Selectio	n Operat	ion Selection			6/6
Operation	Step							
In case of	24 epiacement		uch "Reprogrammi an operation in RE		egory.			
REPRO	GRAMMIN	IG	P					
-	Reprog	nomn ing	In case you	want to reprog	ramming ECU, to	ouch "Reprogra	mming".	
_		y						
1000	ement OF mming (Blan							
	Progr	amming	Before repl	ace ECU, ECU	e ECU, you sho data is saved to LT writes ECU d	CONSULT.		a.
VEHICL	E CONFIGU	RATION		\sim				
		/ Write gutation	Manu	Config		case you has al ach "Manual Co		

Figure 14

25. Replace the old A/T assembly or control valve with a new one (with blank TCM) now:

- Refer to the appropriate section in the ESM for A/T or control valve removal and installation.
- If the CONSULT PC is removed from the vehicle for any reason, make sure the saved data is not erased.
- 26. After the A/T or control valve has been replaced:
 - a. Open / start C-III plus.
 - b. Make sure the ignition is ON (engine OFF).
 - The engine must not start during the programming procedure.
 - c. Make sure the GR8 / battery charger is connected.

NOTE: All C-III plus screens throughout this bulletin are examples. Actual C-III plus screens on your CONSULT PC may vary slightly.

- 27. Wait for the plus VI to be recognized.
 - The serial number will display when the plus VI is recognized.

	Back	Home Print S	Screen Capture Mode Re	iccorded Data
	Conne	ction Status -		Diagnosis Menu
Step 27:		Serial No	Statue	Diagnosis (One System)
Plus VI is recognized	VI	2300727	Normal Mode/Wireless connection	Diagnosis (All Systems)
	МІ	-	\bigcirc	
			No connection	Re/programming, Configuration
		Select VI/MI		Immobilizer
		tion Setting Sub mode	ABC Language Setting	Maintenance
		VDR		

Figure 15

28. Select Re/programming, Configuration.

Back	Home Print	Screen Capture Mode	scorded Data
Connec	tion Status -		Diagnosis Menu
	Serial No.	Status	Diagnosis (One System)
VI	2300727	►>>)))) Normal Mode/Wireless connection	Diagnosis (All Systems)
м	-	No connection	Step
0 144			
	Select VI/M		Immobilizer
	ion Setting Sub mode	Language Setting	Maintenance
	/DR		
		Fig	ure 16

29. Use arrows (if needed) to view and read all precautions.

- 30. Check the box confirming the precautions have been read.
- 31. Select Next.

	Image: Back Image: Back
	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.
	-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.
Step 30	-For ECU Configuration using manual mode 1. 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.
Σ	Next Step 31
	Confirmed instructions
	Figure 17

ITB14-021b

32. Select Infiniti, Vehicle Name, Model Year, and then Select.

- Suren Mode Recorde × Back Home int Scre Ô () Help 12.0V ¥0 Re/programming, Configuration Step Precaution Vehicle Selection Vehicle C This works, too 4 32 Automatic Selection(VIN) Manual Selection(Vehicle Name) Step Channel Model Ye 32 Vehicle Name SSAN *INFINITI EX35 Camp:P8202 INFINITI G37 INFINITI M45 INFINITI QX4 2013 Conve INFINITI INFINITI EX35 INFINITI G37 Coupe INFINITI Q45 INFINITI QX50 2012 INFINITI FX35/FX45 INFINITI G37 Sedan INFINITI Q50 INFINITI QX56 DATSUN INFINITI FX35/FX50 INFINITI 130 INFINITI Q50 Hybrid INFINITI QX60 INFINITI Q60 Convertible INFINITI FX37/FX50 INFINITI 135 INFINITI QX60 Hybrid INFINITI G20 INFINITI JX35 INFINITI Q60 Coupe INFINITI QX70 INFINITI G25/G37 Sedan INFINITI M35/M45 INFINITI Q60 Sedan INFINITI QX80 CLEAR INFINITI G35 Coupe INFINITI M35h INFINITI Q70 INFINITI Q70 Hybrid INFINITI G35 Sedan INFINITI M37/M56 Step Select 32 1/1 1/1
- If the screen in Figure 18 does not display, skip to step 33.

Figure 18

- 33. Make sure VIN or Chassis # matches the vehicle's VIN.
- 34. If the correct VIN is displayed, select Confirm.

ehicle,
Change Confirm Step 34

Figure 19

35. Select Confirm.

NOTE: If there is only one data file saved on C-III plus, it will automatically be selected. If there is more than one, select the data file for your vehicle, and then select **Confirm**.

Configuration	Vehicle Confirmation	Operation Log Selection	
Operation Log Selection			
In case you want to write the sa	the detail (right side). If the deta	nfiguration. le ECU, touch and select the data in Save il is OK, and touch "Confirm". In case you	
Saved Data List	Saved Data Detail		
	Operation	Programming (Blank ECU)	
	System	TRANSMISSION	
	Part Number	32010-XXXXX	1
	Vehicle	XXXXXXX	Delete
	VIN	XXXXXXXXXXX XXXXXX	Other
	Saved Date	13/1/2014 7:06 PM	Operation
	Saved Date		

Figure 20

36. Select After Replace ECU.

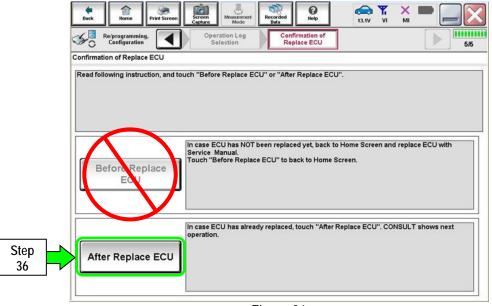


Figure 21

- 37. Use arrows to view and read all precautions.
- 38. Check the box confirming the precautions have been read.
- 39. Select Next.

	Image: Constraint of the sector of		
	Configuration Save ECU Data Precaution Select Program Data	8/11	
	Precaution		
	Operating suggestions: If the reprogramming/programming is unsuccessful, ECU software may be damaged and ECU is no longer usable. Please review the all of precautions, and click the "Confirm" check box after confirming the its points.		
	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. Never depress the brake pedal or turn the steering wheel. Never open each door or trunk rid.</during>		
Step 38	Step 37		
	Confirmed instructions	Next	Step 39
	Figure 22		

40. Select Next.

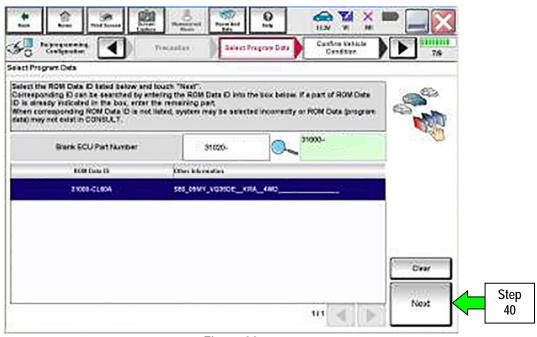


Figure 23

41. Select Next.

Configuration	Measurement Mode Recorded Bats Participation Mil recaution Select Program Data Confirm Vehicle Condition	
vehicle.	nming data is NOT displayed, only one data is available for this ng is wrong, touch "Re-select", and confirm the vehicle	
Part Number After Repro/programming	32010-XXXXX	
Current Part Number	32010-XXXXX	
Vehicle	ХХХХХХХ	
VIN	XXXXXXXXXX XXXXXX	
System	TRANSMISSION	
Expected time to finish re/programming	25min	Re-select
		Next Step 41
	E'	

Figure 24

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

IMPORTANT: Optimum battery voltage operating range for programming is 12.0-13.5V.

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

Back Print Screen Screen Measurement Recorded Help 12.8V Weine Reforgramming. Select Program Data Confirm Vehicle Irange Confirm Vehicle Condition Select Program Data Confirm Vehicle Irange	
Operate according to the following procedures.	Monitor battery voltage here
1 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".	
Result OK	Next Step 43
Eiguro 25	

Figure 25

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 TCM. Allow programming to complete.

44. Select Start.

Back Re/programming, Configuration Confirm Vehicle Condition Confirm the vehicle condition as li	Select Progra	t the vehicle co	Confirm Vehicle Condition	v	nitor battery
Then, confirm that judgment for all out of range, reprogramming or pro Montor item BATTERY VOLTAGE			Start". In case the veh Judgment OK	Condition	
				1/1	Step 44 Start

Figure 26

45. Wait for both progress bars to complete.

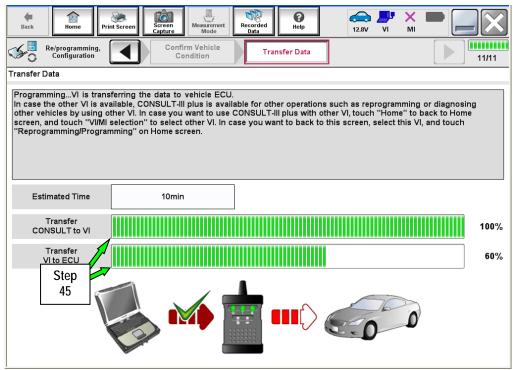


Figure 27

46. When the screen in Figure 28 displays, programming is complete.

NOTE: If the screen in Figure 28 does <u>not</u> display (indicating that programming did <u>not</u> complete), refer to the information on the next page.

- 47. Disconnect the GR8 / battery charger from the vehicle.
- 48. Select Next.

Bick Print Screen Screen Massardment Decorded Decorded		
Confirm Result		
Reprogramming or programming is completed. Touch "Next" to continue operation.		
		Step 48
	Next	48
Elguro 20	,	

Figure 28

NOTE: Completing write configuration and erasing DTCs are required before C-III plus will provide the final programming confirmation report:

So to, "After Programming has Completed: Write Configuration and Erase DTCs" on page 34.

If programming does <u>not</u> complete and the "**!**?" symbol displays as shown in Figure 29:

- 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.

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 esegion = = = = i	
operation on this ECU. Touch "Retry" to retry reprogramming or programming.	
	•
Current Part Number	
Vehicle #ZEOL #AF 1	
System TREMEMATICS	
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	t

Figure 29

If programming does \underline{not} complete and the "X" symbol displays as shown in Figure 30:

- 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.

Back Home Print Screen Capture	Measurement Mode Recorded Bata	-			
Configuration	ansfer Data Confirm Result	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	£3680== = = =				
Current Part Number	18880				
Vehicle	E80 #64.#				
VIN					
System	X 2015 CONTRACTOR OF CONTRACTO				
Date	1/26/20×× 4:29:18 PM				
Other Information	6.26=>6.27				
Error Code		Print			

Figure 30

PROGRAM BLANK TCM (When TCM is NOT Accessible With C-III plus)

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

IMPORTANT: Before starting the program procedure, make sure:

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

NOTE: The CONSULT PC automatically gets applicable TCM 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.

NOTE: After programming is complete, you will be required to perform "write configuration" and "DTC erase".

1. Install the new A/T assembly or Control Valve Assembly (valve body) now.

- Refer to the appropriate ESM for Transmission or Valve Body replacement information.
- 2. Use Infiniti electronic parts information systems to obtain the correct software program part number.
 - Write the software part number on the repair order.

NOTE: If needed, instructions for using the Infiniti electronic parts information systems to obtain the correct software program part number can be found in ASIST under: TECH LINE Support > TECH LINE Method to identify blank TCM part number.

- 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 **TCM 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 **TCM may be damaged**.

- 5. Connect a battery charger to the vehicle battery:
 - GR-8 (Battery and Electrical Diagnostic Station) set to "ECM power supply" mode.

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 **TCM may be damaged**.

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

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

- 7. Turn the ignition ON (engine OFF).
 - The engine must not start or run during the programming 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 **TCM may be damaged**.

9. Open / start C-III plus.

NOTE: All C-III plus screens throughout this bulletin are examples. Actual C-III plus screens on your CONSULT PC may vary slightly.

- 10. Wait for the plus VI to be recognized.
 - The serial number will display when the plus VI is recognized.

	Back Home Print	Screen Screen Mode	
	Connection Status		Diagnosis Menu
	Serial No.	Status	Diagnosis (One System)
Step 10: plus VI is recognized	VI 2300727	▷ >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	
recognized		connection	Diagnosis (All Systems)
	MI -	No connection	Re/programming, Configuration
	Select VI/M	I	
	Application Setting	ABC Language Setting	Maintenance
	VDR		
		Figur	e 1a

11. Select Re/programming, Configuration.

H Back	Home	Screen Capture Mode R	ecorded Data
Connec	tion Status -		Diagnosis Menu
	Serial No.	Status	Diagnosis (One System)
l vi	2300727	▶)))	
	2300727	Normal Mode/Wireless connection	Diagnosis (All Systems)
м	_	\otimes	
		No connection	Re/programming, Configuration
Real Providence	Select VI/M		Immobilizer
	ion Setting	Language Setting	Maintenance
	/DR		

Figure 2a

- 12. Use arrows to view and read all 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.

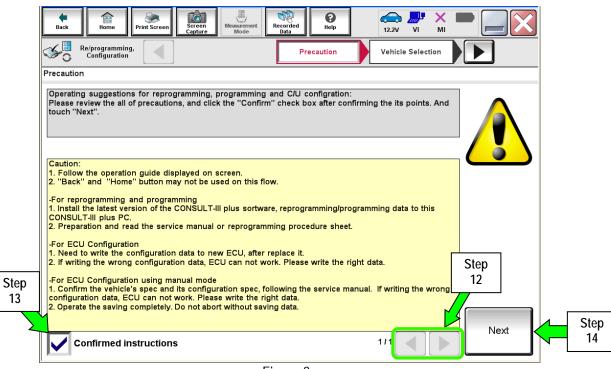


Figure 3a

- 15. Select Infiniti, Vehicle Name, the correct Model Year, and then Select.
 - If the screen in Figure 4a does not display, skip to step 16.

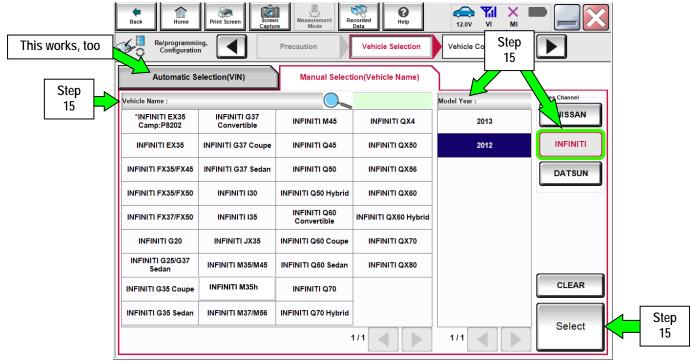


Figure 4a

16. If the correct VIN is displayed, select Confirm.

		Image: Second det Medice Image: Second d		
Step	VIN or Chassis #	XXXXXXXXXX XXXXXX		
	Vehicle Name :	XXXXXXX		
	Model Year	20XX		
		1/1		
			Change Confirm Step 16	p

Figure 5a

- 17. Verify the correct VIN is displayed, and then select Confirm again.
 - If the VIN is not correct, re-type the VIN and then select Confirm.

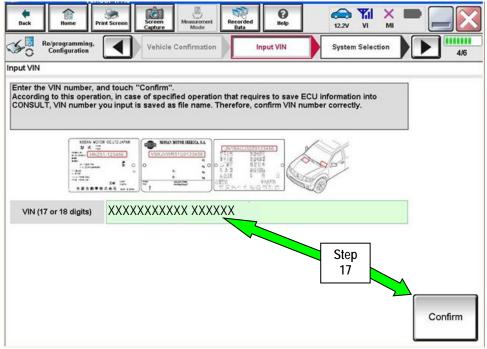


Figure 6a

18. Select Transmission.

Back Re/programming, Configuration System Selection	Input VIN	Operation Selection	
Touch "system". In case ECU you want to operate is not list	ed below, the vehicle or model year might l	pe selected wrong.	
ENGINE	METER/M&A	HVAC	
MULTI AV	ВСМ	TRANSMISSION	Step 18
ABS	CAN GATEWAY		
IPDM E/R	EV/HEV		
HEAD LAMP LEVELIZER	AIR BAG		
	Figuro 7o	1/1	

Figure 7a

19. Select Programming. Do not select Reprogramming.

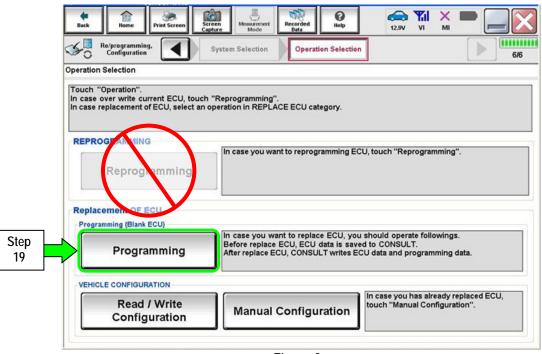


Figure 8a

20. Select Next.

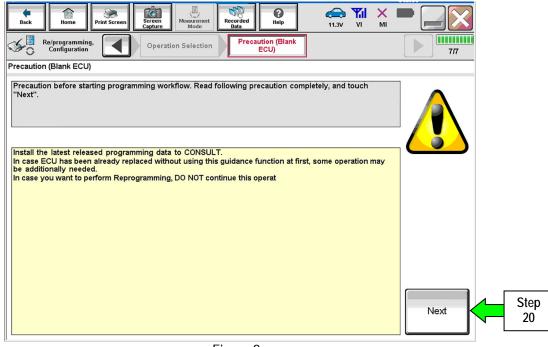
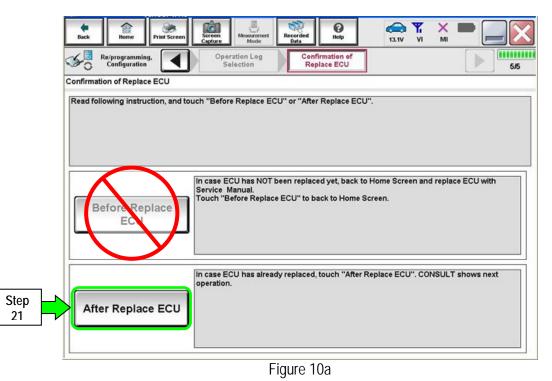


Figure 9a

21. Select After Replace ECU.



- 22. Use arrows (if needed) to view and read all precautions.
- 23. Check the box confirming the precautions have been read.

NOTE: The box cannot be checked until all precautions in step 23 have been viewed and read.

24. Select Next.

	Image: Back Imag
	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. -For ECU Configuration
Step 23	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 1. 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.
	Confirmed instructions

Figure 11a

25. Select the TCM software P/N that matches the P/N written down in step 2 on page 22, and then select **Next**.

1 Party State	Shires			
Back Rome Print Screen Capture	Mode VI VI MI			
Re/programming, Configuration	aution Select Program Data Confirm Vehicle Condition 10/12			
Select Program Data				
Select the ROM Data ID listed below and touch "Next". Corresponding ID can be searched by entering the ROM Data ID into the box below. If a part of ROM Data ID is already indicated in the box, enter the remaining part. When corresponding ROM Data ID is not listed system may be selected incorrectly or ROM Data (program data) may not exist in CONSULT.				
Blank ECU Part Number	31020-75849			
ROM Data ID	Other Information			
31020-XXXXX	TA60/A60/JA60_09/10MY_VK56DE_FED_2WDTOW 3.357_Floor			
31020.XXXXX	TA60/A60/JA60_09/10MY_VK56DE_FED_2WDTOW 3.357_Floor			
31000 <mark>.</mark> XXXXX	TA60_09/10MY_VK56DE_FED_4WDFull Step time/STD_2.937_Floor			
31000.XXXXX	TA60_99/10MY_VK56DE_FED_4WDFull time/STD_2.937_Floor			
31000-XXXXX	TA60_09/10MY_VK56DE_FED_4WDFull time/STD_2.937_Floor			
	1/13 Next			

Figure 12a

26. Select Next.

Back Re/programming, Configuration	Messrement Mode Recorded Bats Program Data	
vehicle.	nming data is NOT displayed, only one data is available for this ng is wrong, touch "Re-select", and confirm the vehicle	
Part Number After Repro/programming	31000-XXXXX	
Current Part Number	31000-XXXXX	
Vehicle	ххххххх	
VIN	XXXXXXXXX XXXXXX	
System	TRANSMISSION	
Expected time to finish re/programming	25min	Re-select
		Next Step 26

Figure 13a

27. Make sure OK is highlighted green (battery voltage must be between 12.0 and 13.5 Volts).

28. Select Next.

۱

IMPORTANT: Optimum battery voltage operating range for programming is 12.0-13.5V. Battery voltage must stay between **12.0 and 15.5 Volts** during programming or TCM programming may be interrupted and the <u>TCM may be damaged</u>.

Image: Back Image: Back <th></th> <th></th>		
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 		

Figure 14a

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 TCM. Allow programming to complete.

29. Select Start.

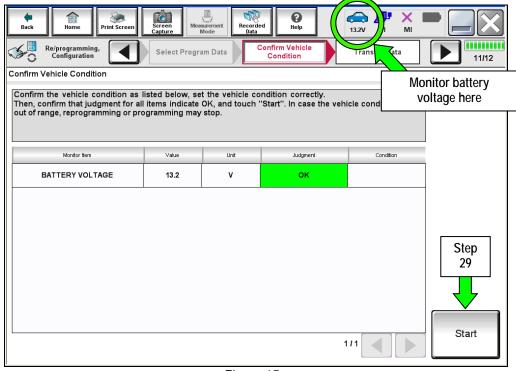


Figure 15a

30. Wait for both progress bars to complete.

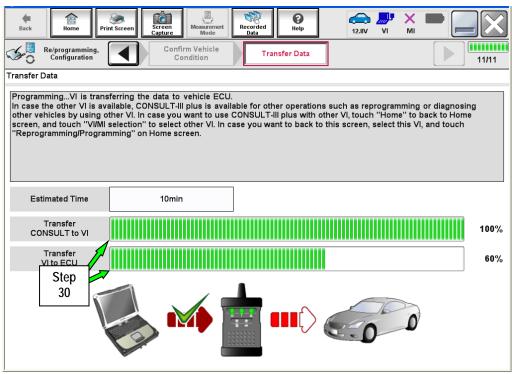


Figure 16a

31. When the screen in Figure 17a displays, programming is complete.

NOTE: If the screen in Figure 17a does <u>not</u> display (indicating that programming did <u>not</u> complete), refer to the information on the next page.

- 32. Disconnect the GR8 / battery charger from the vehicle.
- 33. Select Next.

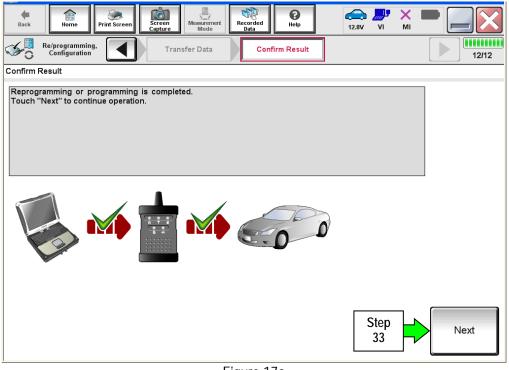


Figure 17a

- **NOTE:** Completing write configuration and erasing DTCs are required before C-III plus will provide the final programming confirmation report:
 - So to, "After Programming has Completed: Write Configuration and Erase DTCs" on page 34.

If programming does <u>not</u> complete and the "!?" symbol displays as shown in Figure 18a:

- 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 Bome Print Screen Capture	Newarament Model Data	×		
Configuration	ansfer Data Confirm Result	9/9		
onfirm 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	2880m m m m m			
Current Part Number	£283B0			
√ehicle	EZEOLEA# 1			
∕IN	ejhiti 1.20 GFactoria xaxaa			
System	THE EMAIN'S			
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 18a

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

- 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.

Messarement Mode Data Que Help 12.3V VI MI	-			
ansfer Data	2/2			
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.				
23380				
269B0				
ILEIO INGA ÎN				
JAN AZBOP #B# #x#x#				
XENERGEREPCIX				
1/26/20XX 4:29:18 PM				
6.26=>6.27				
	Print			
	Bits of the basis Teach Teach N N ansfer Data Confirm Result Integer (Confirm Result) Integer (Confirm Result) ansfer Data Confirm Result Integer (Confirm Result) Integer (Confirm Result) ansfer Data Confirm Result Integer (Confirm Result) Integer (Confirm Result) ansfer Data Confirm Result Integer (Confirm Result) Integer (Confirm Result) ansfer Data Confirm Result Integer (Confirm Result) Integer (Confirm Result) ansfer Data Confirm Result Integer (Confirm Result) Integer (Confirm Result) ansfer Data Confirm Result Integer (Confirm Result) Integer (Confirm Result) ansfer Data Confirm Result Integer (Confirm Result) Integer (Confirm Result) ansfer Data Integer (Confirm Result) Integer (Confirm Result) Integer (Confirm Result) ansfer Data Integer (Confirm Result) Integer (Confirm Result) Integer (Confirm Result) ansfer Data Integer (Confirm Result) Integer (Confirm Result) Integer (Confirm Result) ansfer Data Integer (Confirm Result) Integer (Confirm Result) Integer (Confirm Result)			

Figure 19a

After Programming has Completed: Write Configuration and Erase DTCs

- 1. Follow the instructions as stated on the next few screens (example in Figure 25a):
 - First screen: Turn the ignition OFF, and then ON,
 - (a window will then state System Call is being performed),
 - (the next screen will then state C-III plus is communicating with the ECU).
 - Next screen: Turn the ignition OFF, and then ON.
 - When "Complete" appears in the box, select Next. -

Back Recorded Recorde	← ™ × 12.8V VI M		
Configuration Transfer Data Confirm Result		13/13	
Confirm Result			
Operate according to the following procedures. 1 Turn ignition switch to the OFF position, and wait for 2 seconds or more.			
Current status of ignition switch Waiting Time			
2 Turn ignition switch from the OFF position to the ON position.			
Touch "Next" to go to next operation.		Next	
Figure 20a			

7

2. Perform write configuration of the TCM.

- a. Highlight the Part Number After Configuration and Other Information sections by clicking on them.
- b. Select Next.

Back Home Pr	Capture	Mose errorer Mode Mode aration Mode aration	15		
Write Configuration					
Touch and select the configuration data listed below. In case no configration data is listed below, confirm the vehicle selection, VIN and configuration data in CONSULT.					
System	TRANSMISSI	NON			
Part Number Afte	r Configration	Other Information			
31000-Z ¹	/52E	TA60_09/10MY_VK56DE_FED_4WDFull 2a	eps , 2b		
		Rext			

Figure 21a

- 3. Continue with write configuration and DTC erase by following the instructions on the next few screens:
 - Window in first screen: Writing data is being performed (it may have already past).
 - First screen (finishing write configuration): Turn the ignition OFF, then ON, and then select Next.
 - Next screen (Erase All DTCs): Turn the ignition OFF (a window will state ERASE).
 - When done, a screen similar to Figure 22a will appear.
- 4. Verify the before and after part numbers are different.
- 5. Select **Print** to print a copy of this screen (Figure 22a) and attach it to the repair order.
- 6. Select Confirm.

Back Home Print Screen Capture	Mose arment Recorded Rep 12.9V VI MI	
Configuration	ase All DTCs Print Result / Operation Complete	17/17
Print Result / Operation Complete		
or touch "Screen Capture" to storage of the perform "Diagnosis (All Systems)" to con	pleted. Confirm LAN access, touch "Print" to print out this page, is page temporally. Touch "End" to back to Home Screen, and firm that no DTC is detected. Data Folder" on desk top, and open the folder named	
Part number after Reprog/programming	Step 31000-XXXXX	
Part number before Reprog/programming	4 31020-XXXXX	
Vehicle	XXXXXXX	
VIN	XXXXXXXXXX XXXXXX	
System	TRANSMISSION	Print Step
Date	8/29/2013 2:46:08 PM	
	1/1	Confirm Step 6

Figure 22a

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.
- 7. Select Home to return to the C-III plus home screen.
- 8. Close C-III plus.
- 9. Turn the ignition OFF.
- 10 Disconnect the plus VI from the vehicle.
- 11. Test drive the vehicle to make sure it operates correctly.