

SERVICE BULLETIN

COPYRIGHT© NISSAN NORTH AMERICA, INC.

Classification: AT14-009 Reference: ITB14-037

August 1, 2014

Date:

## 2012 - 2013 M HYBRID; HPCM AND TCM REPROGRAM

APPLIED VEHICLE: APPLIED VIN AND DATE: APPLIED TRANSMISSION: 2012-2013 M Hybrid (HY51) Built before JN1EY1AP(\*)DM 650167 and Feb 2, 2013 Hybrid **only** 

#### IF YOU CONFIRM:

A delay or harsh engagement into reverse is present.

#### ACTION:

- 1. Refer to step 20 in the SERVICE PROCEDURE to confirm this bulletin applies to the vehicle you are working on.
- 2. If this bulletin applies, reprogram the **EV/HEV** (Hybrid Power Control Module) and the **TCM** (Transmission Control Module).

**IMPORTANT**: The purpose of "ACTION" (above) is to give you a quick idea of the work you will be performing. You MUST closely follow the entire Service Procedure as it contains information that is essential to successfully completing the repair.

Infiniti Bulletins are intended for use by qualified technicians, not 'do-it-yourselfers'. Qualified technicians are properly trained individuals who have the equipment, tools, safety instruction, and know-how to do a job properly and safely. NOTE: If you believe that a described condition may apply to a particular vehicle, DO NOT assume that it does. See your Infiniti dealer to determine if this applies to your vehicle.

#### SERVICE PROCEDURE

#### Reprogram the HPCM Controller

**NOTE:** Follow all cautions, warnings, and notes in the ESM when working on or near a High Voltage (HV) System or Supplemental Restraint System (SRS), such as an airbag.

**IMPORTANT:** Before starting, make sure:

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

**NOTE:** The CONSULT PC automatically gets applicable reprogramming 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.
- No DTCs stored. Use C-III plus to perform Self Diagnosis for all systems and erase all DTCs.
- 1. Connect the plus VI to the vehicle, and then to the CONSULT PC with the USB cable.

CAUTION: Make sure the plus VI is securely connected. If the plus VI connections are loose during reprogramming, the process will be interrupted and the Module 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 reprogramming, the process will be interrupted and the **Module May be damaged**.

- 3. Connect the GR8 (Multitasking Battery Diagnostic Station) to the vehicles 12V battery.
  - Set the GR8 to ECM power supply mode.

**NOTE:** Battery voltage must stay between 12 volts and 15.5 volts or reprogramming may not start or be temporarily stopped. Returning battery voltage within the 12-15.5V volt range will resume the reprogramming procedure.

**CAUTION:** Be sure the GR8 is connected securely to the 12V battery. Make sure the battery voltage stays between <u>12.0V and 15.5V</u> during reprogramming. If the battery voltage goes out of this range during reprogramming, the **Module may be damaged**.

4. Turn off all external Bluetooth<sup>®</sup> 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<sup>®</sup> devices. If Bluetooth<sup>®</sup> signal waves are within range of the CONSULT PC and the VI during reprogramming, reprogramming may be interrupted and the **Module may be damaged**.

- 5. Depress the vehicle's power ("ignition") switch twice <u>without</u> depressing the brake pedal.
  - The meter and gauges will illuminate.

CAUTION: Do Not set the vehicle in "READY to drive" mode or vehicle component damage may occur.

• Make sure the ready to drive indicator light is <u>OFF</u> (not illuminated).



Ready to drive indicator light



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 reprogramming. If the battery voltage goes out of this range during reprogramming, the **Module may be damaged**.

- 7. Turn ON the CONSULT PC.
- 8. Select CONSULT-III plus (open C-III plus).

NOTE: Make sure all applications other than C-III plus are closed.

- 9. Wait for the plus VI to be recognized.
- 10. Select Re/programming, Configuration.

	CONSULT-III plus Ver.41.20		Vehicle : -	Country : United States	I
	Back Home Print Scree	Screen Capture	Porded Help 0.0V		
	Connection Status		Diagnosis Menu		1
	Serial No.	Status	Diagnosis (C	one System)	l
9. Plus VI is recognized	VI 2314426	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
recognized		connection	Diagnosis (A	II Systems)	1
	мі -	$\otimes$			Cham
		No connection		ning, Configuration	1 Step
	8 /**				
	Select VI/MI		Immobilizer		
	Application Setting				l
	Sub mode	ABC Language Setting			
	VDR				1
		Fig	ure 1		

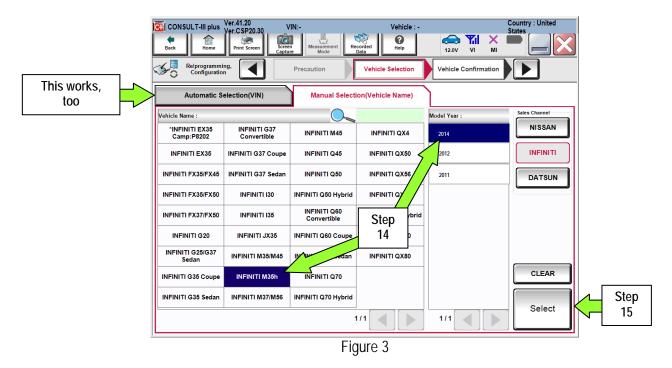
- 11. Use arrows (if needed) to view and read all precautions.
- 12. Check the box confirming the precautions have been read.
- 13. Select Next.

)	🖸 CONSU	LT-III plus	Ver.41.20 Ver.C SP20.30	VIN:-		Vehicle : - Country : United States								
	e Back	Home	Print Screen	Screen Capture	Measurement Mode	Recorded Data	() Help		0.0V	Yil Vi	× MI			$\mathbf{X}$
	So R	e/programmin Configuration	ng,			Prec	aution		Vehicle	Select	tion			
Р	recaution													
	Please rev touch "Ne	riew the all xt''.	ns for reprog of precaution					rming	the its	points	. And			
	Precau Caution:	itions												
	1. Follow		ion guide disp ne" button ma			v.								
	1. Install th CONSULT	ne latest ve -III plus P	and program ersion of the ( C. ead the service	CONSULT-III		· · ·		rammi	ing data	a to thi	is			
		Configurat	tion configuration	data to new	ECU after re	nlace it						Cton		
	2. If writin -For ECU 1. Confirm	g the wron Configurat i the vehicl	ion using ma e's spec and CU can not y	on data, ECU nual mode its configurat	can not wor	k. Please w	•			g the v		Step 11		
			completely.						_		Ľ	5	Next	
		nfirmed i	nstructions					1	1/1				NEXL	
1														

Figure 2

14. Select M35h and 2012 - 2013, or Automatic Selection (VIN).

- If Automatic Selection (VIN) is selected, wait for the Reading VIN screen to complete.
- If the screen in Figure 3 does not display, skip to step 16.
- 15. Select Select.



- 16. Verify the VIN in **VIN or Chassis** # matches the vehicle being reprogrammed.
  - If the correct VIN is displayed, select Confirm.

	CONSULT-III plus Ver.41.20 VIN:	- Vehicle : -	Country : United States			
	Back Home Print Screen Capture		× • • • • •			
	Configuration Vehic	cle Selection Vehicle Confirmation Input VIN				
	Please confirm selected information and touch "Confirm". In case you want to select another vehicle, touch "Change".					
Verify	VIN or Chassis #	JN1EY1AP(*)DM xxxxxx				
here	Vehicle Name :	INFINITI M35h				
	Model Year	2012				
		1/1				
		3				
			Change			
		If OK, select Confirm	Confirm			

Figure 4

17. Wait for system call to complete, and then select **Confirm** again.

CONSULT-III plus Ver.41.20 Ver.CSP20.30	VIN:-	Vehicle : -		Country : United States
Image: Back	Screen Capture	Recorded Data		K <b>-</b>
Re/programming, Configuration	Vehicle Confirmation	Input VIN		
Input VIN				
Enter the VIN number, and touch " According to this operation, in case CONSULT, VIN number you input is	of specified operation	that requires to save ECU ir erefore, confirm VIN number	formation into correctly.	
	VSKJVWR51U0123456 0 40 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
VIN (17 or 18 digits) JN1EY	'1AP(*)DM xxxxxx			
		[	Step 17	Confirm
	_			

Figure 5

18. Select EV/HEV.

CONSULT-III plus Ver.41.20 VII Ver.CSP20.30 VII		Country : United States					
Back Home Print Screen Capture	Measurement Mode						
Re/programming, Input VIN System Selection Operation Selection							
System Selection							
Touch "system". In case ECU you want to operate is not listed below, the vehicle or model year might be selected wrong.							
ENGINE	IPDM E/R	всм					
MULTI AV		LANE CAMERA					
MOTOR CONTROL	HEAD LAMP LEVELIZER	ADAPTIVE LIGHT					
EPS/DAST 3	METER/M8	CAN GATEWAY					
ABS	LASER/RAD 18	EV/HEV					
		1/2					

Figure 6

# 19. Select Reprogramming.

	CONSULT-III plus Ver.41.20 VIN	- Vehicle : ·	Country : United States
	Back Reme Print Screen Capture	Measurement Mode Recorded Data	12.5V VI MI
	Re/programming, Configuration Syst	em Selection Operation Selection	6/6
	Operation Selection		
	Touch "Operation". In case over write current ECU, touch "Re In case replacement of ECU, select an opera	programming". tion in REPLACE ECU category.	
	REPROGRAMMING		
Step 19	Reprogramming	n case you want to reprogramming EC	U, touch "Reprogramming".
	Replacement OF ECU		
	Programming (Blank ECU)		
		n case you want to replace ECU, you Before replace ECU, ECU data is save After replace ECU, CONSULT writes E(	d to CONSULT.
	VEHICLE CONFIGURATION		
	Read / Write Configuration	Manual Configuration	In case you has already replaced ECU, touch "Manual Configuration".
		Figure 7	

- 20. When you get to the screen shown in Figure 8, confirm this bulletin applies as follows.
  - a. Find the EV/HEV Part Number and write it on the repair order.

**NOTE:** This is the <u>current</u> **EV/HEV Part Number** (P/N) and will also be needed for claims information.

CONSULT-III plus Ver.41.20 Ver.CSP20.3	30 VIN:-	Vehicle : -		Country : Un States	ited		
Back Home Print Screen	Screen Capture	nent Recorded Data	12.0V VI	× 🗭 📃			
Re/programming, Configuration	Operation Select	ion Save ECU Data			7/7		
Save ECU Data							
	ext operation by selec	part number as listed below to ( ting suitable operation log. Ope		ased			
File Label	File Label JN1EY1AP(*)DM xxxxxx						
Operation		REPROGRAMMING	3				
System	20a rrent P/N	EV/HEV					
Part Number		237A0-XXXXX	>				
Vehicle		HY51INFINITI HYBRID					
VIN		JN1EY1AP(")DM xxxxxx					
Date			select ave	Sa	ve		
1		Figure 8					

- b. Compare the P/N you wrote down to the numbers in the CURRENT EV/HEV PART NUMBER column in Table A below.
  - If the EV/HEV part number is one of the part numbers listed in the Table A, continue with reprogramming.
    - Select Save, and then go to the next step.
  - If the EV/HEV part number is not listed in Table A, this bulletin does not apply.
    - > Disconnect the GR8 and CONSUTLT PC.

T:	ab	le	Δ
	αIJ	IC.	$\mathbf{n}$

MODEL YEAR	CURRENT EV/HEV PART NUMBER: 237A0 -
	1MG0A, 1MG0B, 1MG0C, 1MG0D
2012 - 2013 M35 (HY51)	1MG4A,1MG4B, 1MG4C, 1MG4D
	1MG8A, 1MG8B
	1PM0A, 1PM0B

- 21. Use arrows (if needed) to view and read all precautions, then check the box confirming the precautions have been read.
- 22. Select Next.

CONSULT-III plus Ver.41.20 Ver.CSP20.30	VIN:-	Vehicle : -	Cou Sta	untry : United tes
Back Home Print Screen	icreen apture Mode Record Data	ed Portugation Provide Address		
Re/programming, Configuration	Save ECU Data	Precaution	Program Data	8/11
Precaution				
Operating suggestions: If the reprogramming/programming is usable. Please review the all of precautions, a			-	
Precautions				
4. DO NOT set the A/C timer or A/C r	emote control system.			
<during reprogramming=""> Never touch the CONSULT-III plus construction Never depress the brake pedal or turn Never open each door or trunk rid.</during>		disconnection.		
				Step 22
	Step 21		ſ	
				Next
Confirmed instructions		2/2		
	Figu	re 9		

## NOTE:

- In some cases, more than one new P/N for reprogramming is available.
  - If more than one P/N is available, the screen in Figure 10 will display. Select and use the reprogramming option that <u>does not</u> have the message "Caution! Use ONLY with NTBXX-XXX".
- If you get this screen and it is <u>blank</u> (no reprogramming listed), it means there is no reprogramming available for this vehicle.

CONSULT-III plus Ver.41	1.20 VIN:- SP20.30 VIN:-	Vehicle : -		Country : United States			
	Screen Screen Mode	Recorded Data	← <b>↓</b> × I 12.3V VI MI	-			
Re/programming, Configuration	Precaution	Select Program Data	Confirm Vehicle Condition	9/11			
Select Program Data	Select Program Data						
In case no reprog/program	Touch and select the reprog/programming data listed below. In case no reprog/programming data is listed below, confirm the vehicle selection, VIN and reprog/programming data in CONSULT.						
System	EV/HEV						
Current Part Number	Part Number After Repr	o/programming	Other Information				
xxxxx-xxxxx	XXXXX-XXX	xx xxx	xxxxxxxxxxxxxxxxxxxxxxxx				
XXXXX-XXXXX	XXXXX-XXXX	xx xxx	*****				
			0/0	Next			

#### Figure 10

- 23. Read the Current Part Number and Part Number After Reprogramming. They should be different.
- 24. Select Next.

CONSULT-III plus Ver.41.20 VIN	:- Vehicle : -		Country : United States				
Back Home Print Screen Capture	Measurement Mode	← <b>™I × I</b> 15.7V VI MI	-				
Re/programming, Configuration	recaution Select Program Data	Confirm Vehicle Condition	9/11				
Select Program Data							
Confirm the detail listed below, and touch "Next" if OK. -In case the screen to select reprog/programming data is NOT displayed, only one data is available for this vehicle. -In case the part number after reprogramming is wrong, touch "Re-select", and confirm the vehicle selection, VIN and reprog/programming data in CONSULT.							
Part Number After Repro/programming	237A0-XXXX	×					
Current Part Number	237A0-XXXX						
Vehicle	HY51 INFINITI HY	BRID					
VIN	JN1EY1AP(*)DM	хххххх					
System	EV/HEV						
Other Information	M35 VQ35HR with A	SCD	Re-select				
Expected time to finish re/programming	5min	Step 24	Next				
Figure 11							

25. Confirm battery voltage is correct, and then select Next.

NOTE: Battery voltage must stay within specified range to make the indicator turn green.

CONSULT-III plus Ver.41.20 Ver.CSP20.30	VIN:-	Vehicle : -			Country : United States
Back Home Print Screen	Screen Capture	Recorded Data	13.6V		
Re/programming, Configuration	Select Program Data	Confirm Vehicle Condition	Trans		10/11
Confirm Vehicle Condition				$\backslash \backslash$	
Operate according to the following p	vrocedures.				nitor 12V ery voltage
1 Remove the terminal caps of batte	ny and connect batteny s	harger to battery			here
2 Adjust the battery charger output 13.5V. The vehicle battery voltage				<b>X</b> 4	1.
			must		
3 Confirm the RESULT is OK, touch	"Next".		en bef cting N		
Result	ок				Next

Figure 12

26. With battery voltage in the green, select Start.

• The reprogramming process begins when **Start** has been selected.

**NOTE:** For reprogramming to continue, vehicle 12V battery voltage must stay within 12 volts and 15.5 volts. Make sure the voltage level is sufficient.

CONSULT-III plus Ver.41.20 Ver.CSP20.30	VIN:-		Vehicle : -			Country : United States
Back Home Print Screen	Screen Meas	Burement Mode	nd Contraction Help	13.6V	× Mi	
Re/programming, Configuration	Select Progra	ım Data	Confirm Vehicle Condition	Transfe	$\overline{\mathbf{x}}$	10/11
Confirm Vehicle Condition Confirm the vehicle condition as I Then, confirm that judgment for all out of range, reprogramming or pro	l items indicate	OK, and touch '		icle conditi		onitor 12V ery voltage here
Monitor Item	Value	Unit	Judgment	Condit	ion	
BATTERY VOLTAGE	13.4	v	ок			
				Step 26		Start
		Figure	e 13			

27. Wait for both bar graphs to complete.

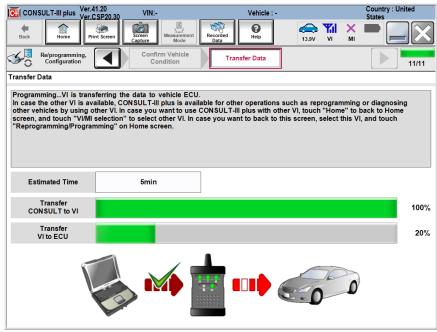
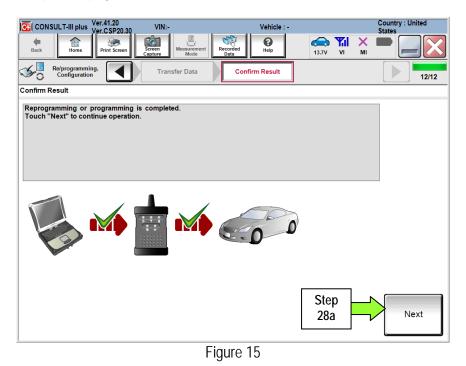


Figure 14

- 28. When the screen in Figure 15 displays, reprogramming is complete.
  - a. Select **Next**, and then wait for System Call to complete.
  - b. Proceed to step 29 on page 14.



NOTE: If the reprogram will not complete, refer to the next page for "recovery" information.

#### **EV/HEV Module recovery**

**NOTE:** If reprogramming does <u>not</u> complete and the **!?** displays as shown in Figure 16:

- Check battery voltage (12.0 15.5V).
- Ignition is ON, Ready Mode is OFF.
- External Bluetooth<sup>®</sup> devices are OFF.
- All electrical loads are OFF.
- Select <u>Retry</u> and follow the on screen instructions.
- <u>Retry may not go through on the first</u> <u>attempt and can be selected more</u> <u>than once</u>.

CONSULT-III plus Ver.41.20 Ver.CSP20.30 VIN:	- Vehicle : -	Country : United States				
Back Home Print Screen Capture	Messrement Mode Data	' 🗙 🖿 📃 🔀				
Re/programming, Configuration	nsfer Data Confirm Result	ele				
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	237A0- <b>xxxxx</b>					
Current Part Number	237A0- <b>xxxxx</b>					
Vehicle	HY51 INFINITI Hybrid					
VIN	JN1EY1AP(*)DM xxxxxx					
System	EV/HEV					
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 16

**OR:** If reprogramming does <u>not</u> complete and the **X** displays as shown in Figure 17:

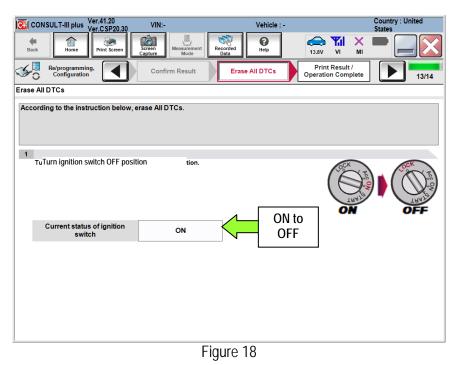
Do not disconnect plus VI or shut down Consult III plus if reprogramming does not complete.

- Check battery voltage (12.0 15.5V).
- CONSULT A/C adapter is plugged in.
- Ignition is ON, Ready Mode is OFF.
- Transmission 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 reprogram procedure from the beginning.

CONSULT-III plus Ver.41.20 VI	N:- Vehicle : -	Country : United States						
Back Rome Print Screen	Measurement Mode Recorded Data	× = _ X						
Re/programming, Configuration	ransfer 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	237A0- <b>xxxxx</b>							
Current Part Number	237A0- <b>xxxxx</b>							
Vehicle	HY51 INFINITI Hybrid							
VIN	JN1EY1AP(*)DM xxxxxx							
System	EV/HEV							
Date	1/26/20XX 4:29:18 PM							
Other Information	6.26=>6.27							
Error Code		Print						

Figure 17

- 29. Erase all DTCs as follows:
- a. Turn the "ignition" off by depressing the power switch once.
  - The screen in Figure 18 will read OFF after pressing the power switch once.



#### b. Wait 1 minute with the ignition OFF.

- c. Turn the "ignition" ON by depressing the power switch twice (not Ready mode).
  - Do not step on the brake pedal when depressing the power switch.
  - The screen in Figure 19 will read ON after pressing the power switch twice.

CONSULT-III plus Ver.41.20 Ver.CSP20.30	VIN:-	Vehicle : -	Country : United States
Back Home Print Screen	Screen Capture	Recorded Help 13.7	
Re/programming, Configuration	Confirm Result		rint Result / ration Complete
Erase All DTCs			
According to the instruction below,	erase All DTCs.		
1 Turn ignition switch to the ON po	sition than All DTCs are	eutemetically evened	
i urn ignition switch to the ON po	sition, then All DTCs are	automatically erased.	CCK YE
			OFF ON
Current status of ignition		OFF to	
switch	OFF		
the actual vehicle ignition swite		he screen differs from the status o o to the next screen.	of
			Next
1			

Figure 19

d. Wait for the **ERASE** function to complete.

	Ver.4	41.20	VIN:-			Vehicle : -			Country : United
	-iii pius yer.(	CSP20.30	VIN:-			venicie : -			States
Back	Home Pr	int Screen	Screen Capture	Measurement Mode	Recorded Data	() Help	13.7V		
Re/pr	ogramming, nfiguration		Confir	m Result	Eras	All DTCs		Result / n Complete	13/14
Erase All DTC:	s ,								
	tion switch to	ERASE						A STATE	
Curre	ent status of switch								
	rrent status al vehicle igr								
ule actua	a venicie igi	nuon switch	, ouch a			i scieen.			Next
				F	igure 2	20			

- 30. Verify the before and after part numbers are different.
- 31. Print a copy of this screen (Figure 21) and attach it to the repair order.
- 32. Select Confirm.

CONSULT-III plus Ver.41.20 Ver.CSP20.30	VIN:-	Vehicle : -			Country : United States		
Back Home Print Screen	Screen Capture	ment Recorded Help	13.7V V				
Re/programming, Configuration	Erase All DTC	Cs Print Result / Operation Complete			14/14		
Print Result / Operation Complete							
All tas is are completed. Confirm LAN access, touch "Print" to print out this page. In case constant can not immediately access to LAN or printer, Screen Capture function is available for temporally storage of this page. Touch "Screen Capture", and save it. Screen capture data is in "CIII plus Data Folder" on desk top, and open the folder named "ScreenImages".							
Part number after Reprog/programming	Step	237A0-XXXXX					
Part number before Reprog/programming							
Vehicle		HY51 INFINITI Hybr	id				
VIN		JN1EY1AP(*)DM xxxx	хх	-			
System		EV/HEV	Step 31		Print		
Date		6/5/2014 2:17:51 P	31				
			Step 32		Confirm		
			-				

Figure 21

## 33. Select Home.

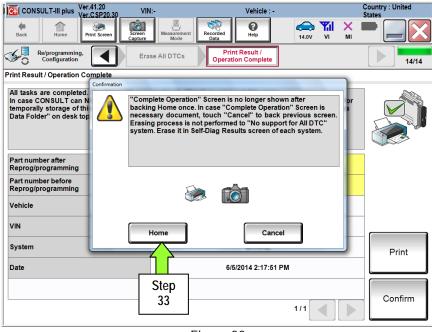


Figure 22

## Reprogram the TCM (Transmission Control Module)

- 1. Perform steps 10 17 starting on page 4 and then proceed to step 2 below.
- 2. Select Transmission.

System Selection	Messurement Mode Input VIN ed below, the vehicle or model year might b	Country : United States 12.00 VI MI Control Co
AIR BAG	TRANSMISSION	
HV BATTERY		
BRAKE	Step	
ICC/ADAS	2	
HVAC		
		2/2
1		

Figure 23

3. Select Reprogramming.

	CONSULT-III plus Ver.41.20 Ver.CSP20.30 V	IN:- Vehicle :	Country : United States
	Back Home Print Screen Captu	Measurement Recorded Help	12.5V VI MI
	Re/programming, Configuration	rstem Selection Operation Selection	6/6
	Operation Selection		
	Touch "Operation". In case over write current ECU, touch "F In case replacement of ECU, select an op		
	REPROGRAMMING		
Stop		In case you want to reprogramming EC	CU, touch "Reprogramming".
Step 3	Reprogramming		
	Replacement OF ECU		
	Programming (Blank ECU)		
	Programming	In case you want to replace ECU, you Before replace ECU, ECU data is save After replace ECU, CONSULT writes E	ed to CONSULT.
	VEHICLE CONFIGURATION		
	Read / Write Configuration	Manual Configuration	In case you has already replaced ECU, touch "Manual Configuration".

Figure 24

- 4. When you get to the screen shown in Figure 25, confirm if this TRANSISSION (TCM) update has already been applied as follows.
  - a. Find the TCM Part Number and write it on the repair order.

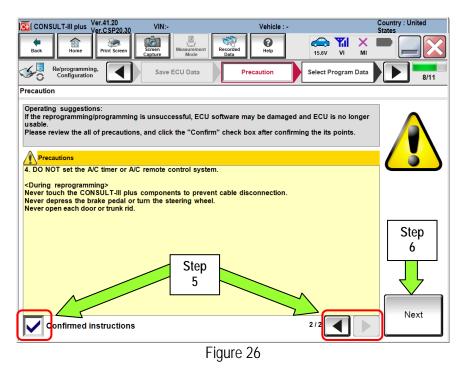
**NOTE:** This is the <u>current</u> **TCM Part Number** (P/N) and will also be needed for claims information.

	/er.41.20 VIN /er.CSP20.30	-	Vehicle : -			Country : United States
Back Home	Print Screen Capture	Measurement Mode	Recorded Data	11.9V		
Re/programmin Configuration	g, Opera	ation Selection	Save ECU Data			7/7
Save ECU Data						
	o restart next operatio		number as listed below to suitable operation log. Op			
File Label			JN1EY1AP(*)DM xxx	ххх		
Operation			REPROGRAMMIN	IG		
System	4a //Current			I		
Part Number	ourientin		31039 -XXXXX	>		
Vehicle			HY51 INFINITI Hyb	rid		
VIN			JN1EY1AP(*)DM xxx	ххх		
Date				(, selec Save	t	Save
7		F	igure 25			

- b. Compare the P/N you wrote down to the numbers in the CURRENT TCM PART NUMBER column in Table B below.
  - If the TCM part number is one of the part numbers listed in the Table B, continue with reprogramming.
    - Select Save, and then go to the next step.
  - If the TCM part number is not listed in Table B, this part of the reprogram has already been performed.
    - Proceed to Step 18 on page 26.

Table B	
MODEL YEAR	CURRENT TCM PART NUMBER: 31039 -
2012 - 2013 M35	3SX0A, 3SX1A, 3SX2A, 3SX3A, 3SX4A, 3SX5A, 3SX9A
(HY51)	X960A, X961A, X963A, X964A, X966A

- 5. Use arrows (if needed) to view and read all precautions, then check the box confirming the precautions have been read.
- 6. Select Next.



#### NOTE:

- In some cases, more than one new P/N for reprogramming is available.
  - If more than one P/N is available, the screen in Figure 27 will display. Select and use the reprogramming option that <u>does not</u> have the message "Caution! Use ONLY with NTBXX-XXX".
- If you get this screen and it is <u>blank</u> (no reprogramming listed), it means there is no reprogramming available for this vehicle.

CONSULT-III plus Ver.41	1.20 SP20.30 VIN:-	Vehicle : -		Country : United States			
	nt Screen Screen Measurement Capture Measurement Mode	Recorded Help	12.3V VI MI Confirm Vehicle Condition	9/11			
Select Program Data							
Touch and select the reprog/programming data listed below. In case no reprog/programming data is listed below, confirm the vehicle selection, VIN and reprog/programming data in CONSULT.							
System	TRANSMISSION						
Current Part Number	Part Number After Re	pro/programming	Other Information				
XXXXX-XXXXX	XXXXX-XXX						
XXXXX-XXXXX	XXXXX-XXX	XXX XXXX	****				
				Next			
			0/0				



- 7. Read the Current Part Number and Part Number After Reprogramming. They should be different.
- 8. Select Next.

CONSULT-III plus Ver.41.20 Ver.CSP20.30	VIN:- Vehic	le : -	Country : United States
Back Home Print Screen	en Measurement Recorded Help	15.7V VI MI	
Re/programming, Configuration	Precaution Select Program	Confirm Vehicle Condition	9/11
Select Program Data			
Confirm the detail listed below, and tou -In case the screen to select reprog/pro vehicle. -In case the part number after reprogram selection, VIN and reprog/programming o	gramming data is NOT displayed, only nming is wrong, touch "Re-select", and		
Part Number After Repro/programming	31039	-xxxxx	
Current Part Number	31039	-XXXXX	
Vehicle	HY51 INFIN	TI Hybrid	
VIN	JN1EY1AP(*	DM xxxxx	
System	TRANSM	SSION	
Other Information	DATA FOR ECU as	BRAKE(EACT)	Re-select
Expected time to finish re/programming	5mi	"Step	Next
	Figure 20		

Figure 28

9. Confirm battery voltage is correct, and then select Next.

NOTE: Battery voltage must stay within specified range to make the indicator turn green.

CONSULT-III plus Ver.41.20 Ver.CSP20.30	VIN:-	Vehicle : -		Country : United States
Back Back Print Screen	Screen Capture	Recorded Data	13.6V /I MI	
Re/programming, Configuration	Select Program Data	Confirm Vehicle Condition	Trans	10/11
Confirm Vehicle Condition				
Operate according to the following p	procedures.		M	onitor 12V
			batt	tery voltage
1				here
Remove the terminal caps of batte	ry, and connect battery	charger to battery.		
2			No. 200 11	N 1
Adjust the battery charger output 13.5V. The vehicle battery voltage			- And C	<u>Li</u>
		OK	Cmust be	
3		gre	en before	
Confirm the RESULT is OK, touch	ı "Next".		cting Next	
				≺
			7	Next
Result	ок			Next
	F	Figure 29		

- 10. With battery voltage in the green, select Start.
  - The reprogramming process begins when **Start** has been selected.

**NOTE:** For reprogramming to continue, vehicle 12V battery voltage must stay within 12 volts and 15.5 volts. Make sure the voltage level is sufficient.

CONSULT-III plus Ver.41.20 Ver.CSP20.30	VIN:-		Vehicle : -			Country : United States
Back Home Print Screen	Screen Capture	Surement Mode	d Pelp	13.6V	× I	
Re/programming, Configuration	Select Progra	am Data	Confirm Vehicle Condition	Transfe	$\overline{\mathbf{x}}$	10/11
Confirm Vehicle Condition	V-4-1	4 4k k !- !			Mo	onitor 12V
Confirm the vehicle condition as Then, confirm that judgment for al out of range, reprogramming or pro	Il items indicate	OK, and touch '		icle conditi	batt	ery voltage
				L		here
Monitor Item	Value	Unit	Judgment	Condi	ton	
BATTERY VOLTAGE	13.4	v	ок			
				Chan		
				Step 10		Start
				.0		
		Figure	e 30			

11. Wait for both bar graphs to complete.

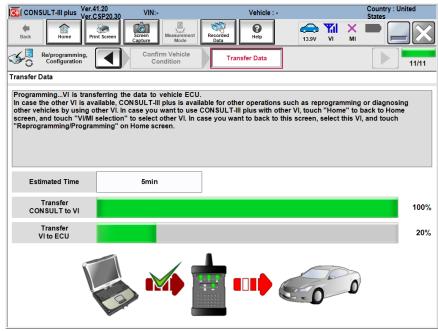
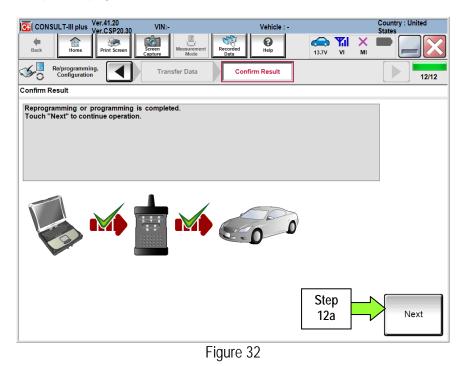


Figure 31

- 12. When the screen in Figure 32 displays, reprogramming is complete.
  - a. Select Next, and then wait for System Call to complete.
  - b. Proceed to step 13 on page 24.



NOTE: If the reprogram will not complete, refer to the next page for "recovery" information.

## TCM (Transmission Control Module) recovery

**NOTE:** If reprogramming does <u>not</u> complete and the **!?** displays as shown in Figure 33:

- Check battery voltage (12.0 15.5V).
- Ignition is ON, Ready Mode is OFF.
- External Bluetooth<sup>®</sup> devices are OFF.
- All electrical loads are OFF.
- Select <u>Retry</u> and follow the on screen instructions.
- Retry may not go through on the first attempt and can be selected more than once.

CONSULT-III plus Ver.41.20 Ver.CSP20.30 VIN:	- Vehicle : -	Country : United States				
Back Home Print Screen	Measurement Mode Recorded Bata					
Re/programming, Configuration	nsfer Data Confirm Result	ele				
Confirm Result						
Reprogramming or programming is not con operation on this ECU. Touch "Retry" to retry reprogramming or pro	ipleted properly, but you can retry reprog/programmin; ogramming.					
Part number after Reprog/programming	31039-XXXXX					
Current Part Number	31039-XXXXX	31039-XXXXX				
Vehicle	HY51 INFINITI Hybrid					
VIN JN1EY1AP(')DM xxxxxx						
System	TRANSMISSION					
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				
		Print				

Figure 33

**OR:** If reprogramming does <u>not</u> complete and the **X** displays as shown in Figure 34:

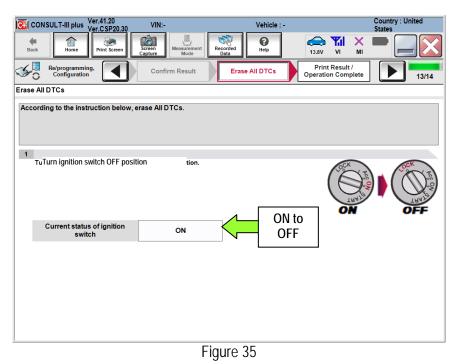
Do not disconnect plus VI or shut down Consult III plus if reprogramming does not complete.

- Check battery voltage (12.0 15.5V).
- CONSULT A/C adapter is plugged in.
- Ignition is ON, Ready Mode is OFF.
- Transmission 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 reprogram procedure from the beginning.

CONSULT-III plus Ver.41.20 Ver.CSP20.30 V	N:- Vehicle : -	Country : United States
Back Rome Print Screen Scree	Messarmert Mode Recorded Data	
Configuration	Fransfer Data	2/2
Confirm Result		
Reprogramming or programming is not c reuse anymore. Touch "Home" to back to Home Screen, r	ompleted property. ECU has been broken, and impossible to eplace ECU with Service Manual.	
Part number after Reprog/programming	31039-XXXXX	
Current Part Number	31039-XXXXX	
Vehicle	HY51 INFINITI Hybrid	
VIN	JN1EY1AP(*)DM xxxxxx	
System	TRANSMISSION	
Date	1/26/20XX 4:29:18 PM	
Other Information	6.26=>6.27	
Error Code		Print
L		

Figure 34

- 13. Erase all DTCs as follows:
  - a. Turn the "ignition" off by depressing the power switch once.
    - The screen in Figure 35 will read OFF after pressing the power switch once.



- b. Wait 1 minute with the ignition OFF.
- c. Turn the "ignition" ON by depressing the power switch twice (not "Ready" mode).
  - Do not step on the brake pedal when depressing the power switch.
  - The screen in Figure 36 will read ON after pressing the power switch twice.

CONSULT-III plus Ver.41.20 Ver.CSP20.30	VIN:-	Vehicle : -	Country : United States
Back Rome Print Screen	Screen Capture	Recorded Data	13.7V VI MI
Re/programming, Configuration	Confirm Result	Erase All DTCs	Print Result / Operation Complete 13/14
Erase All DTCs			
According to the instruction below, e	rase All DTCs.		
1			
Turn ignition switch to the ON pos	ition, then All DTCs are	automatically erased.	VOCK 2
			TRATE TRATE
		OFF to	
Current status of ignition switch	OFF		
If the current status of ignition s the actual vehicle ignition switcl			tus of
ule actual venicle ignition switch	I, IOUCH NEXT IO go	o to the next screen.	
			Next

Figure 36

e. Wait for the **ERASE** function to complete.

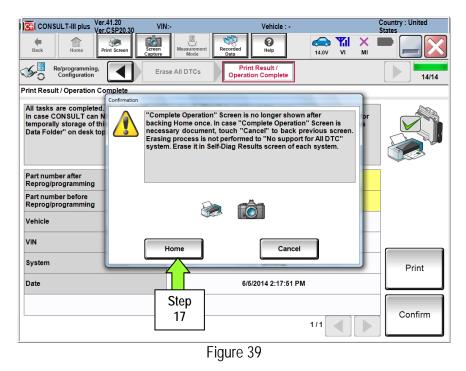
CONSULT-III plus	Ver.41.20 Ver.CSP20.30	VIN:-	Vehicle : -		Country : United
Back Home	Print Screen	Screen Capture	8	13.7V VI MI	
Re/programmi Configuration	ng,	Confirm Result	Erase All DTCs	Print Result / Operation Complete	13/14
Erase All DTCs	(				
According to the inst	ERASE				
Current statu swit					
If the current sta the actual vehicl		n, washine tu	yo to the next screen.		
					Next
			Figure 37		

- 14. Verify the before and after part numbers are different.
- 15. Print a copy of this screen (Figure 38) and attach it to the repair order.
- 16. Select Confirm.

CONSULT-III plus Ver.41.20 Ver.CSP20.30	VIN:-	Vehicle : -			Country : United States
Back Home Print Screen S	icreen apture	ement Recorded Help	13.7V V		
Re/programming, Configuration	Erase All DT	Cs Print Result / Operation Complete			14/14
Print Result / Operation Complete					
All tasts are completed. Confirm LAN In case Consol: I can nor immediat temporally storage of this page. Touci Data Folder" on desk top, and open th	ely access to l h "Screen Cap	AN or printer, Screen Capture fu oture", and save it. Screen capture			
Part number after Reprog/programming	Step	31039-XXXXX			
Part number before Reprog/programming	14	31039-XXXXX			
Vehicle		HY51 INFINITI Hybr	id		
VIN		JN1AV7A(*)XEM xxx	ххх	-	
System		TRANSMISSION	Step 15		Print
Date		6/5/2014 2:17:51 P	15		
			Step 16		Confirm

Figure 38

17. Select Home.



#### 18. Select Diagnosis (All Systems)

- 19. After system call has completed select **ERASE** to clear any remaining DTCs.
- 20. Once all DTCs have been cleared turn "ignition" off (depress power switch once).
- 21. Select Home, and then on the next screen select Yes (screen not shown).
- 22. Close C-III plus, turn off the CONSULT PC, and then disconnect the CONSULT PC and plus VI from the vehicle.
- 23. Verify no additional error messages are displayed in the meter and gauges or center multi-function control panel.

## CLAIMS INFORMATION

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

OPERATION	OP CODE	PFP	SYM	DIAG	FRT
EV/HEV and TCM REPROGRAMMING	JX29AA	(1)	ZE	32	0.7

(1) Refer to the electronic parts catalog (FAST) and use the A/T Assembly part number (31020 - \*\*\*\*\*) as the Primary Failed Part (PFP).