

SERVICE BULLETIN

Classification: ST13-005 Reference: ITB13-046 COPYRIGHT© NISSAN NORTH AMERICA, INC. Date:

December 23, 2013

2014 Q50 LOW POWER ASSIST FROM ADAPTIVE STEERING SYSTEM

APPLIED VEHICLES: 2014 Q50 (V37) equipped with Direct Adaptive Steering (DAST) 2014 Q50 Hybrid (HV37)

IF YOU CONFIRM:

The power steering has "low power assist",

and

One or more of the following DTCs are stored in DAST1, DAST2 or EPS/DAST3 as current or past:

C13AB-00	C13BE-00	C13C0-00	C13D5-00	C13EB-00	C13F0-00
C13AC-00	C13BF-00	C13C1-00		C13E6-00	
		C13C2-00		C13E9-00	
		C13C3-00			
		C13C4-00			

NOTE: For all other DAST system DTCs or low power assist issues, call TECH LINE for additional assistance.

ACTION:

- 1. Refer to step 14 in the **SERVICE PROCEDURE** to confirm that this bulletin applies to the vehicle you are working on.
- 2. If this bulletin applies, perform the complete reprogram and calibration / confirmation procedures.

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 <u>entire</u> **SERVICE PROCEDURE** as it contains information that is essential to successfully completing this repair.

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

SERVICE PROCEDURE

There are two parts to this Service Procedure:

PART 1: Reprogramming Procedure. This includes three separate control unit reprograms; DAST 1, DAST 2, and EPS/DAST 3.

PART 2: Calibration and Confirmation Procedure. This includes the following: DAST CALIBRATION (MODE1), ADJUST STEERING ANGLE SENSOR NEUTRAL POSITION, Self-Diagnosis Check, Confirmation of EPS/DAST 3 ANGLE 1, and Check Steering Off-center / Pull.

PART 1: Reprogramming Procedure

NOTE: PART 1 must be performed 3 separate times to reprogram the control units for DAST 1, DAST 2, and EPS/DAST 3.

- 1. Before continuing, it is IMPORTANT to make sure:
 - ASIST on the CONSULT PC has been freshly synchronized (updated).
 - All CONSULT related software updates (if any) have been installed.

NOTE: The CONSULT PC automatically gets all reprogramming software during ASIST synchronization.

CAUTION:

- Connect the GR8 to the vehicle 12 volt battery and set to ECM power supply mode. If the vehicle battery voltage drops below <u>12.0V or rises above 13.5V</u> during reprogramming, <u>the DAST may be damaged</u>.
- Be sure to turn OFF all vehicle electrical loads.
 If a vehicle electrical load remains ON, <u>the DAST may be damaged</u>.
- Be sure to connect the AC Adapter. If the CONSULT PC battery voltage drops during reprogramming, the process will be interrupted and the DAST may be damaged.
- Turn off all external Bluetooth[®] devices (e.g., cell phones, printers, etc.) within range of the CONSULT PC and the VI. If Bluetooth[®] signal waves are within range of the CONSULT PC during reprogramming, reprogramming may be interrupted and <u>the DAST may be damaged</u>.
- 2. Once all ASIST and CONSULT related updates have been performed, attach the CONSULT PC to the vehicle.
 - Connect the plus VI to the CONSULT PC with the USB cable.
 - Connect the AC adapter to the CONSULT PC.

3. Turn ON the CONSULT PC, and then open CONSULT III plus (C-III plus).

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

- 4. Press the ignition switch twice <u>without</u> depressing the brake pedal.
 - The meter and gauges will illuminate.

CAUTION: <u>Do Not</u> start the engine, the DAST may be damaged. (For Hybrid vehicles, make sure the Ready light is OFF.)

NOTE: Make sure <u>ALL</u> accessories are turned off.

- 5. Erase all stored DTCs as follows:
 - a. Wait for the plus VI to be recognized.
 - b. Select Diagnosis (All Systems) and Confirm.
 - c. Wait for system call to complete.
 - d. Erase all DTCs.
- 6. Go to Re/programming, Configuration.
 - a. Select the Home button, and then select YES to return to the screen shown in Figure 1.
 - b. select Re/programming, Configuration.

	CONSULT-III plus Ver.V14.11.00	VIN:-	Vehicle : -	Country : U.S.A.
	Back Rome Print Screen	Screen Capture Mode Record	ied Generation 13.5V VI M	-
Plus VI is recognized	Back Home Print Screen Connection Status VI 2300182 MI -	Step Sb Step Sb Iormal Mode/USB connection No connection Step 6b	Diagnosis Menu Diagnosis (One System) Diagnosis (All Systems) Configuration Immobilizer	
	Application Setting	BC Language Setting	Maintenance	

Figure 1

7. Check the box for **Confirmed Instructions**, and then select **Next**.

CONSULT-III plus Ver.V14.11.00 VIN:-	Vehicle : -		Country : U.S.A.
Image: Back Image: Back	Z rement Recorded Data	13.5V VI MI	-
Re/programming, Configuration	Precaution	Vehicle Selection	
Precaution			
Operating suggestions for reprogramming, progra Please review the all of precautions, and click the ' touch ''Next''.	mming and C/U configration: 'Confirm'' check box after confirmin	g the its points. And	
Caution: 1. Follow the operation guide displayed on screen 2. "Back" and "Home" button may not be used or	1 this flow.		
-For reprogramming and programming 1. Install the latest version of the CONSULT-III plus CONSULT-III plus PC. 2. Preparation and read the service manual or rep	sortware, reprogramming/programr rogramming procedure sheet.	ning data to this	
For ECU Configuration 1. Need to write the configuration data to new ECU 2. If writing the wrong configuration data, ECU car	J, after replace it. n not work. Please write the right da	ata.	
-For ECU Configuration using manual mode 1. Confirm the vehicle's spec and its configuration configuration data, ECU can not work, Playmont 2. Operate the saving completed	Step 7	If writing the wrong	
Confirmed instructions		1/1	Next

Figure 2

- 8. Select Q50 and 2014, or Automatic Selection(VIN).
 - Under Manual Selection(Vehicle Name) select Infiniti, Q50, 2014 and then click Select.
 - For Hybrid vehicles, select Infinity Q50 Hybrid and 2014.
 - If Automatic Selection (VIN) is selected, wait for the Reading VIN screen (not shown) to complete.
- 9. Select Select.

	CONSULT-III plus	Ver.31.11 Ver.CSP19.10 V	1N:-	Vehicle : -		Country : United States
	Eack Horne	Print: Screen Capito	n Monterert A	scorded Data	13.5V VI MI	-
This works	Configuratio		Precaution	Vehicle Selection	Vehicle Confirmation	
too	Automatic S	election(VIN)	Manual Select	tion (Vehicle Name))	
	Vehicle Name :		0		Model Year :	Sales Channel
	"INFINITI EX35 Camp:P8202	INFINITI G35 Sedan	INFINITI M37/M56	INFINITI QX56	2014	NISSAN
	INFINITI EX35	INFINITI G37 Convertible	INFINITI M45	INFINITI QX60	5	INFINITI
	INFINITI EX35/EX37	INFINITI G37 Coupe	INFINITI Q45	INFINITI QX60 Hybrid		
	INFINITI FX35/FX45	INFINITI G37 Sedan	INFINITI Q50	St	ep	
	INFINITI FX35/FX50	INFINITI ISO	INFINITI Q50 Hybrid	INFINITI QX	8	
	INFINITI FX37/FX50	INFINITI 135	INFINITI Q60 Convertible			
	INFINITI G20	INFINITI JX35	INFINITI Q60 Coupe			
	INFINITI G25/G37 Sedan	INFIINITI M35/M45	INFINITI QX4			CLEAR
	INFINITI G35 Coupe	INFINITI M35h	INFINITII QX50		Step	Coleat
				1/1	9	Select

Figure 3

- 10. Verify the **VIN or Chassis #** matches that of the vehicle.
 - If the correct VIN is displayed, select **Confirm**.

	CONSULT-III plus Ver.31.11 VIN: Ver.CSP19.10 VIN:	- Vehicle ; -	Country : United States
	Rack Home Print Screen Capture	Meanserment Mode Boda	13.6V VI MI
	Configuration Vehi	Vehicle Confirmation	
	Please confirm selected information and to touch "Change".	uch "Confirm". In case you want to selec	t another vehicle,
Verify			
here	VIN or Chassis #	JN1BV7AP2EM	
	Vehicle Name :	INFINITI Q50	
	Model Year	2014	
			1/1
			Change
		lf O C	K, select onfirm
	1.	Figure 4	

NOTE: Write the last 6 digits of the VIN on the repair order. You will need it later in the procedure.

11. Select Confirm again.

e Back	Home Pr	int Screen	Screen Capture	arement Node	ied Help		() 11.8V			
C C	programming, Configuration		Vehicle Confi	mation	Input VIN		System S	Selection		4/6
Input VIN										
Enter the V According CONSULT,	/IN number, a to this operati VIN number y	nd touch "C on, in case ⁄ou input is	Confirm''. of specified o saved as file r	peration that re name. Therefor	equires to save re, confirm VIN r	ECU info number o	ormation correctly	i into		
	NISSAN MOT Bit of the constant of the constant of the constant the con	DR CO_LTD_JAPAN 11-123456 이 11-123456 이 다 다 다 11-123456 이 다 다 12-123456 이 다 다 다 다 다 다 다 다 다 다 다 다 다	NISSAY NOTOR IBEE	XA, S.A. 1456 1456 1400 1456 1457 1456 1456 1457 1456 1457	13220123456 数3485 数3485 数3485 章 影 章 影 章 章 章 章 章 章 章 章 章 章					
VIN (17 c	or 18 digits)	JN 11E		H9101 14	4					
						1			ſ	
							Ste 11	ep I		Confirm

Figure 5

12. Use the page arrows to scroll and **select the correct control unit** to be reprogrammed.

Make sure to reprogram the control units in this order:

DAST 1, then DAST 2, and then EPS/DAST 3

NOTE: DAST 1 and DAST 2 are shown in Figure 6; EPS/DAST 3 is not shown.

CONSULT-III plus Ver.31.21	VIN:		Vehicle : INF	INITI Q50 V37 2014	Country : United States
Eack Herrie Print Screen	Screen Capture	ert Recorded Data	0 Note	12.1V VI M	K 💻 🔜 🔀
So Reprogramming.	Input VIN	System	Selection	Operation Selectio	n b 5/6
System Selection					
In case ECU you want to operate i	s not listed below, th	ne vehicle or mo	del year migh	t be selected wrong.	
AVM		TRANSMISSIO	N		
CHASSIS CONTROL		Step			
DAST 1		12			
DAST 2				Scroll with	1
HIGH BEAM ASSIST				arrows	
		Figure	6		

13. Wait for System Call to complete, and then select Reprogramming.

	Consultant plus Vervier, 1.60 VIN. Venicle . LEAF ZE0 2011 Country . 0,574.
	Image: Back Image: Back
	Re/programming. Configuration System 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
Step	In case you want to reprogramming ECU, touch "Reprogramming".
13	Reprogramming
	Replacement OF ECU
	Programming (Blank ECU)
	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.
	Read / Write Configuration

Figure 7

- 14. When you get to the screen shown in Figure 8, confirm reprogramming applies as follows:
 - A. Find the DAST **Part Number** and write it on the repair order.

NOTE: This is the <u>current</u> DAST Part Number. DAST 1 is shown; DAST 2 and DAST 3 are similar.

	CONSULT-III plus Ver.31.21	VIN:	Vehicle : INFINITI Q50 V37 2014	Country : United States				
	Eack Barne Print Screen	Screen Capture Mode Ba	eded Notp 22.1V VI M	- 🗕 🔀				
	Configuration Selection Save ECU Data							
	Save ECU Data							
	Touch "Save" to save operation log and the current part number as listed below to CONSULT. Operation log helps to restart next operation by selecting suitable operation log. Operation log is erased after operation has completely finished.							
	File Label	JN1BV7AP6EM	7					
	Operation		REPROGRAMMING					
Current Part	System		DAST 1					
Number	Part Number	(285054GA1B					
	Vehicle		V37INFINITI Q50					
	VIN		JN1BV7AP6EM					
	Date		6/18/20 If a match,	Save				
		Fig						

- B. Compare the P/N you wrote down to the numbers in the Current Part Number column of Table A below:
 - If there is a match, that reprogramming <u>applies</u>. Continue with the reprogramming procedure. •
 - If there is not a match, that reprogramming does not apply. •

NOTE: If there is no match for DAST 1, there will be no match for DAST 2 or DAST 3. You can stop. This bulletin does not apply.

Table A		
MODEL	CONTROL UNIT	CURRENT PART NUMBER:
	DAST 1	28505 – 4GA1B, 4GA1C
2014 Q50 (V37/HV37)	DAST 2	28505 – 4BA6B, 4GA6C
	EPS/DAST 3	285H0 – 4GA5B, 4GA5C

C. If there is a part number match as specified above, Select Save, and then continue with the reprogramming procedure on the next page.

15. Read the precautions on the C-III plus screen (use page arrow as needed). After reading, select **Confirmed instructions**, and then select **Next**.

CONSULT-III plus Ver.V14.11.00 VIN:	Vehicle : LEAF ZE0 2011	Country : U.S.A.
Back Rome Print Screen Capture Mossurement Mode	Recorded Data	-
Re/programming, Configuration Save ECU Data	Precaution Select Program Data	8/11
Precaution		
Operating suggestions: If the reprogramming/programming is unsuccessful, ECI usable. Please review the all of precautions, and click the "Conf	J software may be damaged and ECU is no longer irm" check box after confirming the its points.	
Precautions		/ ŏ \
Work preparation I. Install the latest version of the reprogramming data t Z. Turn off any wireless devices such as mobile phone PC preparation Close all other software except CONSULT-III plus an Check that the screen saver is turned OFF. To do this "Properties". Select the Screen Saver tab then select "(N click "OK". Soperate the PC using the A/C adaptor to keep the ba A D0 NOT disconnect the VI diagnosis data Vehicle preparation Adjust the battery charge output so the Step Start Solv. For EV, D0 NOT charge the solver and do not oper So D0 Yot m OFF all electrical context models of the prevention Do NOT turn OFF all electrical context models Continned instructions	to this CONSULT-III plus PC. s, cordless phones, transceivers, etc. d DO NOT activate any other software. ,right-click on the PC Desktop, and select None)" from the Screen Saver pull-down menu, and lttery charged. Ing report/programming. In the 12V battery is in the range of 12.0V to ate any elbo. The 12V battery is in the range of 12.0V to ate any elbo. The 12V battery is in the range of 12.0V to ate any elbo. The 12V battery is in the range of 12.0V to ate any elbo.) Next
	Figure 9	

NOTE: In some cases, more than one new P/N for reprogramming is available.

- ▶ In this case, 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 ITBXX-XXX".
- If you get this screen and it is <u>blank</u> (no reprogramming listed), it means there is no reprogramming available for that control unit.

CONSULT-III plus Ver.V	14.21.00 VIN:	Vehicle :	LEAF ZE0 2011	Country : U.S.A.		
Back Home Prin	int Screen Screen Mode	Recorded Help	12.3V VI	× • 📄 🤛		
Re/programming, Configuration	Precaution	Select Program Dat	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	DAST 1			<u>()</u>		
Current Part Number	Part Number After Rep	ro/programming	Other Information			
XXXXX-XXXXX XXXXX-XXXXX	XXXXX-XXX XXXXX-XXX	xx xx xx xx				
				Nevt		
			0/0			

Figure 10

16. Verify the Current Part Number matches the Part Number written down in step 14, and then select Next.

Vencar 19.10	VIN:	Vehicle ; INFINIT	Q50 V37 2014	Coun State	itry : United
tack Home Print Screen	reen plure Mode B	Roderd Roder	13.6V VI	<u>ж</u> П	
Configuration	Precaution	Select Program Data	Confirm Vehi Condition	cie 🔰	9/11
elect Program Data	100				
In case the screen to select reprogipry vehicle. In case the part number after reprogra selection, VIN and reprogiprogramming	ogramming data is NOT Imming is wrong, touch g data in CONSULT.	displayed, only one data i "Re-select", and confirm i	s available fo he vehicle	r this	
Part Number After Repro/programming		28505	>		
(1) CARLENDER 1990					
Current Part Number		28505	>		
Current Part Number		28505 V37 INFINITI Q50	>		
Current Part Number		28505 V37 INFINITI Q50 JN1BV7AP2EM	>		
Current Part Number		28505 V37 INFINITI Q50 JN1BV7AP2EM DAST 1	>		
Current Part Number		28505 V37 INFINITI Q50 JN1BV7AP2EM DAST 1 L53H_ST1			Re-select

Figure 11

- 17. If the screen in Figure 12 appears, first select **Delete**, then **Confirm**, and then **Other Operation**.
 - This will erase the **Saved Data List** and restart the reprogram from step 12. You must go back to step 12.
 - If no Saved Data List is stored, Figure 13 on the next page will be displayed.

Measurement Measurement Infirmation Infirm	Operation Log Selection	a select the data in Save	
amming and cont NSULT to vehicle side). If the detail tion".	Operation Log Selection figuration. le ECU, touch and l is OK, and touch	select the data in Save "Confirm". In case yo	
ramming and con NSULT to vehicle side). If the detail tion". ta Detail	nfiguration. le ECU, touch and l is OK, and touch	i select the data in Save) "Confirm". In case yo	
ramming and con DNSULT to vehicle side). If the detail tion". ta Detail	nfiguration. le ECU, touch and ll is OK, and touch	i select the data in Save 1 "Confirm". In case yo	
ta Detail	RE	ODOCOANNING	
	RE	ODOCOANNING	
AL	196	PROGRAMMING	
1		DAST 1	
mber	-	285H0	
		Step	Delete
	JN		Other
Date	1/26	5/2012 8:37:38 AM	
		1/1	Confirm
>	iate	iate 1/2	INL

Figure 12

18. Confirm battery voltage is correct, and then select **Next**.

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

CONSULT-III plus Ver.V14.11.00 VIN:	Vehicle : LEAF 750 0011	Country : U.S.A.
Image: Constraint of the second sec	Help 12.6V VI	* 🗙 🗭 📃 🔀
Re/programming, Configuration Precaution Sele	ct Program Data	hicle on 10/11
Confirm Vehicle Condition		<u> </u>
Operate according to the following procedures.	N ba	Nonitor 12V ttery voltage
1 Remove the terminal caps of battery and connect battery charger to	hattery	nere
2 Adjust the battery charger output so that the vehicle battery voltage 13.5V. The vehicle battery voltage is shown on the top-right of this s	is between 12.0V and creen	
	Must be	
3 Confirm the RESULT is OK, touch "Next".	"Green" before selecting Next	
Result OK	Step 18	Next
Figure	e 13	

- 19. With battery voltage OK (green), select Start.
 - The reprogramming process begins when **Start** is selected.

NOTE: For reprogramming to continue, vehicle 12V battery voltage must stay within 12 volts and 13.5 volts.

Reiprogramming. Configuration Image: Configuration	n Screen Mar	Recorded Node	e Help	52.1V	× ×	
Reprogramming.	1 colores	100		the second se		
	Select Progra	im Data	Condition	Trans	~	10/11
nfirm Vehicle Condition onfirm the vehicle condition i hen, confirm that judgment for ut of range, reprogramming or	as listed below, se r all items indicate programming may	t the vehicle cor OK, and touch " stop.	idition correctly. Start". In case the v	ehicle condi	Mo batte	nitor 12V ery voltage here
Monitor ten	Value	Unit	Judgment	Cond	ton	
BATTERY VOLTAGE	12.0	v	OK]
			Г	Stop		

Figure 14

IMPORTANT: Until the reprogramming has completed:

• Do not disconnect the USB cable, although the following message appears:

"Disconnecting CONSULT and VI is Available"

- <u>Do not touch the **Home** button until instructed to</u>.
- When the plus VI is transferring the reprogram to the DAST control unit, do not disconnect the plus VI from the vehicle even if the PC freezes.
- To disconnect the plus VI, first check the LED on the plus VI body to confirm that the communication from the plus VI to the vehicle has completed and the LED for the vehicle icon is OFF.
- If you accidentally disconnect the plus VI during program writing to the vehicle, the DAST control unit that is being reprogrammed will need to be replaced.
- 20. Wait for both bar graphs to complete.

CONSULT-III plus Ver	-31.11 VIN -CSP19.10 VIN			Vehicle : INF	INITI Q50 V37	20:14	Country States	: United
tack Home	Print Screen Capture	Messa revent Mode	Recorded Data	0 Help	13.9V		× 🖿 (
Configuration		nfirm Vehicle Condition	Tran	sfer Data				11/11
Transfer Data								
other vehicles by using screen, and touch "Vin "Reprogramming/Progr Estimated Time	other VI. In case yo dl selection" to sele amming" on Home s	u want to use t other VI. In c screen.	CONSULT-III ase you war	plus with oth	er VI, touch his screen, s	"Home" elect thi	to back to H s VI, and tou	lome Ich
Transfer CONSULT to VI								100%
Transfer VI to ECU								40%
Ň		•		••••	.0		٥	

Figure 15

Possible errors that may rarely occur:

- If the progress bar freezes at 90% of a complete transfer to the plus VI and error code "12-1-1NR" is displayed (see Figure 16 on the next page), <u>turn the ignition OFF, then ON</u>, and then refer to Control Unit Recovery on the next page.
- If the progress bar freezes at 90% more than 3 times "on the same DAST control unit" but without Error Code "12-1-1NR", replace only the DAST control unit that is currently being reprogrammed, and then reprogram to the most current software.

NOTE: If a DAST control unit replacement is required:

- Refer to the appropriate section of the ESM for the procedure to replace and configure a DAST control unit.
- Make sure to perform Read/Write Configuration and save the Control unit's configuration before replacement, and then write the configuration to the new control unit.

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

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

- Check battery voltage (12.0–13.5 V).
- Ignition is ON, engine OFF (not READY).
- External Bluetooth[®] 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 attempt and can be selected more than once.</u>

	Vehicle : INFINITI Q50 V37 :	2014 Country : North America Common
tank Barne Print Screen Capture	Besserverset Recorded Bets	VI 🕺 🖿 💻 🔀
Configuration	Confirm Result	3/3
Confirm Result		
Reprogramming or programming is not co operation on this ECU. Touch "Retry" to retry reprogramming or pr	mpleted properly, but you can retry reprog/programmi rogramming.	
Part number after Reprogiprogramming	28505-4GA6C	
Current Part Number	28505-4GA6B	
Vehicle	V37INFINITI Q50	
Vehicle	V37INFINITI Q50 Select Retry if Error	
Vehicle VIN System	V37INFINITI Q50 Select Retry if Error Code 12-1-1-NR is	
Vehicle VIN System Date	V37INFINITI Q50 Select Retry if Error Code 12-1-1-NR is present.	Retry
Vehicle VIN System Date Other Information	V37INFINITI Q60 Select Retry if Error Code 12-1-1-NR is present. L53H_ST2	Retry

Figure 16

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

- Check battery voltage (12.0 13.5 V).
- CONSULT A/C adapter is plugged in.
- Ignition is ON, engine OFF (not READY).
- 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 reprogram procedure from the beginning.

Corfin Resul	
Corfire Resul	99
1. 1000	(No
aan, Kawi-ower switch posmin, shin posmon a start the reprogramming again.	rd de
284B2-XXXXX	
284B2-XXXXX	
QASHQAI	
SJNFDNJ10U100000	
всм	
29/07/2011 16:30:00	
	Print
	atartiha reprogramming again. 28482-XXXXX 28482-XXXXX QASHQAI QASHQAI SUNFDNU10U100000 BCM 29/07/2011 16:30:00

Figure 17

- 21. When the screen in Figure 18 appears, reprogramming is complete.
- 22. Select Next.
- 23. Wait for System Call to complete.



Figure 18

- 24. Erase all DTCs:
 - a. Turn "ignition" OFF.
 - The screen in Figure 19 will read OFF after pressing the power switch once.

G CONSULT-III plus Ver.V14	1.11.00	VIN:		Vehicle : LE	EAF ZE0 2011	Country : U.S.A.
Back Borne Print	Sereen Ser	een ture Mode	r Recorded Data	0 Help	12.6V VI	× = _ X
Configuration		Confirm Result	Eras	e All DTCs	Print Resu Operation Con	lt / nplete 13/14
Erase All DTCs						
According to the instruction Turn ignition switch OF	F position	e All DTCs.				
Current status of ig switch	nition	ON			FF	

Figure 19

- b. Turn the ignition ON with engine OFF (press switch twice, no foot on brake).
 - The screen in Figure 19 will read ON after pressing the power switch twice.

NOTE: Do not be confused by any screen messages. At this point, simply turn the ignition ON.



- c. Wait for the bar graph in the **ERASE** window to complete 100%.
- d. Select Next.

CONSULT-III plus Ver.31.11 Ver.CSP19.10	VIN	Vehicle : INFIN	ITI Q50 V37 2014	Country : United States
terne Back Barne Print Screen	Screen Capture	Recorded Data	13.6V VI MI	-
Re/programming.	Confirm Result	Erase All DTCs	Print Result / Operation Complete	13/14
Erase All DTCs				
According to the instruct ERASE Turn ignition switch to Step 24C If the current status c the actual vehicle ignition switce	h, touch "NEXT" to go	to the next screen.	FF	
			Step 24d	Next

Figure 21

- 25. Verify the part number has changed (before and after reprogramming part numbers should be different).
 - a. Print a copy of the screen in Figure 22 by selecting **Print**.
 - b. Attach the copy to the repair order.
 - c. Once a copy has been printed, select **Confirm**.

CONSULT-III plus Ver.31.11 Ver.CSP19.10	VIN:	Vehicle : IN	FINITI Q50 V37 2014	Country : United States
te Sick Nome Print Screen	Screen Capture	Recorded Data	13.5V VI	x 🖿 📃 🔀
Configuration	Erase All DTCs	Print Result / Operation Complete		14/14
Print Result / Operation Complete				
All tasks are completed Confirm L In case Consolut - can NOT immed temporally storage of this page. To Data Folder" on desk top, and oper	AN access, touch "Pr ately access to LAN o uch "Screen Capture" the folder named "Sc	int" to print out this page or printer, Screen Capture i , and save it. Screen capture reenImages".	function is available f ure data is in "Cill plu	or s
Part number after Reprog/programming	Step	28505	<u>111</u>	
Part number before Reproglprogramming	25	28505		
Vehicle		V37 INFINITI Q	50	
VIN		JN1BV7AP2EM	Step	
System		DAST 1	25a	Print
Date		9/24/2013 9:14:12	2 AM	
			Step 25c	Confirm

Figure 22

26. After Confirmation has completed, select Home

CONSULT-III plus Ver.V	14.11.00 VIN:		Vehicle : LEAF Z	E0 2011	(Country : U.S.A.
Back Prin	t Screen Capture	Measurement Mode Recorde	d 🕜	(12.5V VI	MI	•
Re/programming, Configuration	Eras	se All DTCs	Print Result / eration Complete			14/14
Print Result / Operation Cor	mplete				10	
All tasks are completed. In case CONSULT can No temporally storage of this Data Folder'' on desk top, Part number after Reprog/programming	Confirmation "Comp backin backin necess	lete Operation'' Screer g Home once. In case sary document, touch '	n is no longer shown : "Complete Operation" "Cancel" to back prev	after ' Screen is ious screen.	for is	
Vehicle	(
System Date		lome	Cancel			Print
	S	tep 26		1/1		Confirm

Figure 23

- 27. Repeat the entire reprogramming procedure for DAST 2.
- 28. Repeat the entire reprogramming procedure for EPS/DAST 3.

After all three reprograms are complete, go to step 29.

29. Check for DTCs in DAST 1, DAST 2, and EPS/DAST 3.

- a. Open C-III plus, and then select **Diagnosis (All Systems)** and **Confirm**.
- b. Wait for system call to complete.
- c. Check for stored DTCs.
 - If no DTCs are stored, go to **PART 2** on the next page.
 - If C13C0 or C13C2 are stored in DAST 1 or DAST 2, go to DAST DTCs on page 25.
 - If DTC C13F2 is stored in DAST 1, DAST 2, or DAST 3 as current:
 - > Then, at least one of the DAST control units did not complete the reprogramming correctly.
 - > Perform reprogramming again for the DAST control unit that <u>Does Not</u> have this code.
 - If only DTCs other then the ones listed above are stored, erase DTCs and go to **PART 2** on the next page.

NOTE: If a DAST control unit replacement is required:

- Refer to the appropriate section of the ESM for the procedure to replace and configure a DAST control unit.
- Make sure to perform Read/Write Configuration and save the Control unit's configuration before replacement, and then write the configuration to the new control unit.

PART 2: Calibration and Confirmation Procedures

NOTE: PART 2 includes the following:

- DAST CALIBRATION (MODE1)
- ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION
- Self-Diagnosis Check
- Confirmation of EPS/DAST 3 ANGLE 1
- Check Steering Off-center / Pull

DAST CALIBRATION (MODE1)

CAUTION:

- Never move the vehicle during **DAST CALIBRATION (MODE1)** because the steering gear is held in a neutral position until the ignition switch is turned OFF.
- Never rotate the steering wheel more than 120 degrees just after **DAST CALIBRATION (MODE1)** has been completed because the spiral cable will be damaged.

WARNING: <u>Be careful of moving parts</u>. The steering wheel and front wheels will move automatically by themselves after starting DAST CALIBRATION (MODE1).

Before starting Calibration Mode1:

- Place the vehicle on an alignment rack and then remove the pins from the turn tables so they are allowed to move freely, or place the vehicle on a lift so that the tires do not touch the ground.
- Place the steering wheel tilt to the highest level.
- <u>Connect a battery charger to the vehicle battery set to a low charge rate</u>.

NOTE: This calibration procedure will be performed <u>twice</u> completely through.

IMPORTANT: <u>Do Not</u> turn the ignition OFF at the end of the second time through.

- 1. Make sure the plus VI is still connected to the vehicle and to the CONSULT PC with the USB cable.
- 2. Make sure the AC adapter is still connected to the CONSULT PC.

- 3. Push the ignition button twice (without brake depressed) to turn the ignition ON.
 - **IMPORTANT**: Do Not start the engine (for Hybrid models the READY light must be OFF).
- 4. Turn ON the CONSULT PC, and then open C-III plus (if not already open).
- 5. On the C-III plus screen, select **Diagnosis (All Systems)**. After system call has completed, select **EPS/DAST 3** >> **Work support** >> **DAST CALIBRATION (MODE1)**. See Figure 24.

CONSULT-# plus Ver.31.11 VIN:	Vehicle : INFINITI Q50 V37 2014	Country : United States
Image: Constraint of the second sec		-
Diagnosiis (All Select Vehicle Confirm Vehicle	Diagnosis (All Systems)	
Self Diagnostic Data Monitor	ECU Configuratio	n
Text Item DAST CALIBRATION (MODE1) DAST CALIBRATION (MODE2)	Step 5	
	Step 6	Start
Figure	24	

- 6. Select START, and then START a second time to begin DAST CALIBRATION (MODE1).
 - Do not rotate the road wheels during the DAST calibration.

WARNING: <u>Be careful of moving parts</u>. The steering wheel and front wheels will move automatically by themselves after starting DAST CALIBRATION (MODE1).

NOTE: If DAST CALIBRATION (MODE1) will not start, refer to DAST DTCs on page 25.

7. When Auto steering has completed, center the steering wheel to the neutral (straight ahead) position, and then select **Start** again (see Figure 25).

CAUTION: When DAST CALIBRATION (MODE1) has completed, the steering wheel is disconnected from the steering gear and the force feedback of the steering is reduced. **Never turn the steering wheel** beyond 120 degrees otherwise the spiral cable will be damaged.

CONSULT-III plus	/er.31.11 VIN:	Vehicle ; If	Vehicle : INFINITI Q50 V37 20:14 Country : United States				
tack forme	Print Screen Capture Model	nt Recorded Bolp	13.6V VI MI				
Diagnasis (All Systems)	Select Vehicle Car	firm Vehicle Diagnosis Systems	All DEPSIDAST3				
Work support : DAST (CALIBRATION (MODE1)						
Auto steering is com Position the steering CAUTION: Since the f take good care for bu	pleted. Wheel to no trail. Then press "S force feedback of steering becom urging the steering.	itart" nes smaller after the complet	tion of "auto steering",	Start			
Also, do not turn the	steering beyond 120 degrees.						
				Step			
				/			
				End			

Figure 25

8. Select End.

CONSULT-III plus Ver.CSP19.10 VIN:					NFINITI Q50 V37 2014	Country : United States
Eack Borne	Print Screen	Screen Capture Mod	Recorded	0 help	13.6V VI MI	-
Diagnosis (All Systems)	Sele	ct Verhicle 🕨 C a	nfirm Vehicle 🕨	Diagnosis Systems	(All DEPS/DAST3	
Work support : DAS	T CALIBRATION	(MODE1)				
"DAST CALIB-RATI NOTE: "OFF-CENT	ION (MODE1)" i ER" is not used	s completed.				Start
MONITOR						
OFF-CENTER					0 deg	
					Step 8	End

Figure 26

- 9. Turn the ignition switch OFF.
- 10. With the C-III plus still connected, repeat steps 1-8 a second time, but <u>Do Not</u> turn the ignition OFF after step 8, and then proceed to step 11.
- 11. Select the BACK button twice, and then select Yes to "Delete results".
 - After system call completes, proceed to ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION on the next page.

IMPORTANT: <u>Do Not</u> turn the ignition OFF.

 If the ignition is turned OFF between the DAST CALIBRATION (MODE1) and ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION, the procedure for DAST CALIBRATION (MODE1) <u>must</u> be started over from step 1.

ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION

- 1. With C-III plus in Diagnosis (All Systems), select ABS >> Work support >> ST ANGLE SENSOR ADJUSTMENT, and then select START.
- 2. When the message "Waiting for your operation..." is displayed, select **Start**.

IMPORTANT: <u>Do Not</u> touch the steering wheel while adjusting steering angle sensor.

CONSUL T-III p	Ver.31.11 Ver.CSP19.10	VIN:		Vehicle : INFIN	ITI Q50 V37	20:14	Cou Stat	ntry : United es
tack Rom	e Print Screen	Screen Capture	Recorded Data	() Itolp	13.9V	VI VI	× 🔳	
Diagnosis (Systems)	All 🕨 Sele	ect Vehicle 🕨	Confirm Vehicle 🕨	Diagnosis (All Systems)	•	ABS		
Work support : ST	ANGLE SENSOR	ADJUSTMENT						
Gurrent status	AFTER REEP TH		IG WHEEL IS IN TH	Walti	ng for you	r opera	tion	Start Step 2
					Ste 3	:p		End

Figure 27

- 3. When the message **COMPLETE** is shown (after approx. 5 seconds), select **End**.
- 4. Turn the ignition switch OFF and wait at least 10 seconds, then go to "Self-Diagnosis Check" on the next page.

SELF-DIAGNOSIS Check

- 1. Start the engine or place in READY mode (turn ignition ON with brake pressed).
- 2. Check for DTCs in DAST 1, DAST 2, and EPS/DAST 3 as follows:
 - A. On C-III plus, return to the Home screen.
 - B. Select Diagnosis (All Systems), and then select Confirm.
 - C. Wait for system call to complete.
 - D. Check for stored DTCs
 - If no DTCs are stored, go to CONFIRMATION of EPS/DAST 3 ANGLE 1 on the next page.
 - If DTCs C13E9-00, C13EB-00, and/or C13F0-00 are stored:
 - a. Erase all DTCs
 - b. Change the steering wheel tilt to a slightly lower position.
 - c. Perform DAST CALIBRATION (MODE1) again.
 - d. Perform SELF-DIAGNOSIS Check again.
 - e. Repeat a d above until no DTCs are stored.
 - f. Go to CONFIRMATION of EPS/DAST 3 ANGLE 1 on the next page.

IMPORTANT: <u>Do Not</u> drive the vehicle.

CONFIRMATION of EPS/DAST 3 ANGLE 1

NOTE: At this point the ignition should still be ON with the engine running or the READY light ON.

- 1. With C-III plus in **Diagnosis (All Systems)**, select **EPS/DAST 3** >> **DATA MONITOR** >> **ANGLE 1**, and then check the value of **ANGLE 1** (see Figure 28).
 - ANGLE 1 should be within the standard value shown below.
 - If ANGLE 1 is not within the standard value:
 - a. Change the steering wheel tilt to a slightly lower position.
 - b. Perform DAST CALIBRATION (MODE1) again.
 - c. Perform CONFIRMATION of EPS/DAST 3 ANGLE 1 again.
 - d. Repeat a c above until ANGLE 1 is within the standard value.

Monitor item	Standard value		
ANGLE 1	between -4.4 and 4.4		

CONSU	JLT-III plus Ve	r.31.11 r.CSP19.10	VIN:			Vehicle : IN	FINITI Q50 V37 20	14	Country : U States	nited
Back	Home	Print Screen	Screen Capture	Measurement	Recorded Data	() Help	13.6V VI	• × Mi	-	
Data Mon	itor				L	ine Graph		Sin	gle List	•
E	PS/DAST 3	ANGLE 1			-		-	8 deg		
							1	Ì		
							Ste	ep		
							2			
		Explanation	1	Trigger Is	ofo				Record	
			_			_				

Figure 28

Check Steering Off-center and Pull

Test drive the vehicle and check for any pull or off-center condition.

- If there **is not** any pull or off center condition, the Service Procedure in the bulletin is complete.
- If there is any pull or off-center condition, drive the vehicle as follows.
- 1. Safely drive the vehicle as follows:
 - In a straight line (hold the steering wheel so the vehicle stays in a straight line)
 - On a smooth, straight, flat road
 - Speed of 40 mph or more (recommend staying at below 50 mph)
 - For at least 5 seconds
 - The DAST will automatically correct the off-center condition. During the above drive the steering wheel will gently and very slowly move to a center position while driving straight.

NOTE:

- Make sure to operate the vehicle safely.
- Using a smooth, straight, flat road with very light or no traffic is recommended.
- Bumps, pot holes, or other steering input may affect the calibration, which will require a repeat of step 1.
- Traffic conditions that require steering input may affect the calibration, which will require a repeat of step 1.
- 2. Recheck: If the steering wheel is still off-center while driving straight, repeat step 1.
- 3. When there is no pull or off center condition, the Service Procedure in this bulletin is complete.

DAST DTCs

NOTE: Perform the following steps only if:

- DTCs are stored for DAST 1 and/or DAST 2.
- DAST CALIBRATION (MODE1) will not start.
- 1. Check DTCs for **DAST 1**.
 - If C13C0 and C13C2 are detected as <u>current</u> on **DAST 1**, replace the control unit for **DAST 2**.
 - If DTCs can not be read (DAST 1 is not listed), go to step 2 and check DTCs for DAST 2.
- 2. Check DTCs for **DAST 2**.
 - If C13C0 and C13C2 are detected as current on **DAST 2**, replace the control unit for **DAST 1**.
 - If DTCs can not be read (DAST 2 is not listed), turn the ignition switch OFF and then back ON. Then go back to Check DTCs for DAST 1 (step 1) again.
 - If step 1 and step 2 are repeated more than 5 times and there is still no DTCs stored/listed, replace the control unit for DAST 3.

NOTE: If a DAST control unit replacement is required:

- Refer to the appropriate section of the ESM for the procedure to replace and configure a DAST control unit.
- Make sure to perform Read/Write Configuration and save the Control unit's configuration before replacement, and then write the configuration to the new control unit.

PARTS INFORMATION

DESCRIPTION	PART #	QUANTITY
DAST 1 Control Unit	28505 - 4GA1D	Replace Control Unit Only if
DAST 2 Control Unit	28505 - 4GA6D	indicated in the Service
EPS/DAST 3 Control Unit	285H0 - 4GA5D	Procedure – this is not expected.

CLAIMS INFORMATION

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

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Reprogram all DAST Control Modules	(1)	QX27AA	ZE	32	2.1

(1) Reference the repair order and use the DAST 1 control unit part number written down in step 14 of the service procedure as the PFP.

If required

CLAIMS INFORMATION

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

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
RPL Power Steering Main Control Unit	(1)	RS53AA	ZE	32	(2)

(1)Use the DAST 1 Control Unit part listed in the parts information as the PFP.

(2) Reference the current Infiniti Warranty Flat Rate Manual and use the indicated flat rate time.

AND/OR

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

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
RPL Power Steering Sub Control Unit	(1)	RS54AA	ZE	32	(2)

(1) Use the DAST 2 Control Unit part listed in the parts information as the PFP.

(2) Reference the current Infiniti Warranty Flat Rate Manual and use the indicated flat rate time.

AND/OR

CLAIMS INFORMATION

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

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
RPL PS Column Control Assy	(1)	RS13AA	ZE	32	(2)

(1) Use the EPS/DAST 3 Control Unit part listed in the parts information as the PFP.

(2) Reference the current Infiniti Warranty Flat Rate Manual and use the indicated flat rate time.