INFINITI®

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June 29, 2016

Date:

VOLUNTARY SAFETY RECALL CAMPAIGN 2014 Q50 HYBRID WITH AVM; DIRECT ADAPTIVE STEERING CONTROL MODULE REPLACE, REPROGRAM, AND RECALIBRATE

CAMPAIGN ID #: R1613

NHTSA #: 16V-430

APPLIED VEHICLES: 2014 Q50 Hybrid (V37)

Check Service COMM to confirm campaign eligibility.

- There are multiple bulletins with different campaign ID numbers for the DAST system.
- Each bulletin is applicable to specific vehicles.
- Make sure the correct bulletin (Campaign ID #) is being used.

INTRODUCTION

Infiniti is conducting a Voluntary Safety Recall Campaign on certain specific Model Year 2014 Q50 Hybrid vehicles to replace and reprogram the Direct Adaptive Steering (DAST) control modules, and recalibrate the DAST system. This Service will be performed at no cost to the customer for parts or labor.

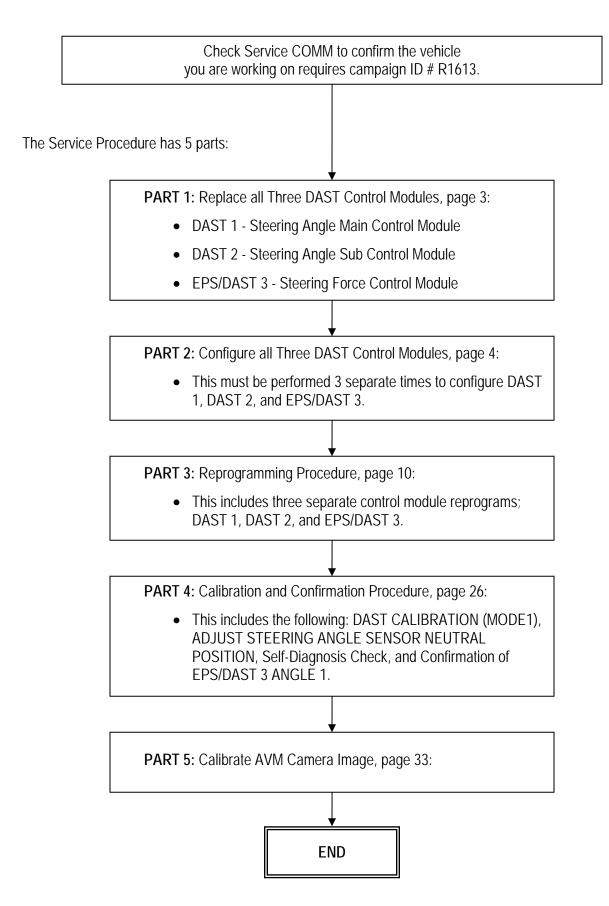
IDENTIFICATION NUMBER

Infiniti has assigned identification number R1613 to this campaign. This number must appear on all communication and documentation of any nature dealing with this campaign.

DEALER RESPONSIBILITY

It is the dealer's responsibility to check Service COMM for the campaign status on each vehicle falling within the range of this voluntary safety recall which for any reason enters the service department. This includes vehicles purchased from private parties or presented by transient (tourist) owners and vehicles in a dealer's inventory. Federal law requires that new vehicles in dealer inventory which are the subject of a safety recall must be corrected prior to sale. Failure to do so can result in civil penalties by the National Highway Traffic Safety Administration. While federal law applies only to new vehicles, Infiniti strongly encourages dealers to correct any used vehicles in their inventory before they are retailed.

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 retailer to determine if this applies to your vehicle.



SERVICE PROCEDURE

PART 1: Replace all Three DAST Control Modules

1. Replace all three DAST Control Modules (see Figure R1):

DAST 1 - Steering Angle Main Control Module

• For R&R information, refer to the Service Manual > Section STC > Direct Adaptive Steering > Steering Angle Main Control Module.

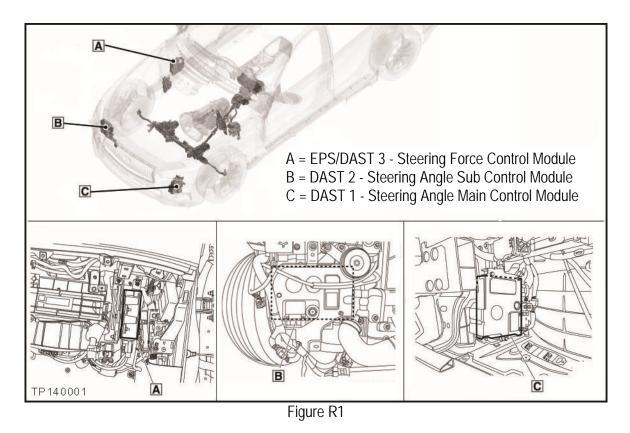
DAST 2 - Steering Angle Sub Control Module

• For R&R information, refer to the Service Manual > Section STC > Direct Adaptive Steering > Steering Angle Sub Control Module.

NOTE: The washer bottle does not need to be removed. Suspend it with string while replacing DAST 2 control module.

EPS/DAST 3 - Steering Force Control Module

• For R&R information, refer to the Service Manual > Section STC > Direct Adaptive Steering > Steering Force Control Module.



2. After all three DAST Control Modules are replaced; go to PART 2: Configure all Three DAST Control Modules on the next page.

PART 2: Configure all Three DAST Control Modules

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

- 1. Connect CONSULT-III plus (C-III plus) and the plus VI to the vehicle.
- 2. Turn the ignition ON (engine OFF / not Ready).
- 3. Turn ON the CONSULT PC.
- 4. Open C-III plus and wait for the plus VI to be recognized.
- 5. Select Re/programming, Configuration.

	Back	Home Print	Screen Capture Mode	scorded Data	
	Conne	ction Status -		Diagnosis Menu	
		Serial No.	Status	Diagnosis (One System)	
Step 4: plus VI is recognized	VI	2300182	Normal Mode/USB connection	Diagnosis (All Systems)	_
	м		0	Step 5	
		-	No connection	Re/programming, Configuration	
	* 6°	Select VI/MI		Immobilizer	
		tion Setting Sub mode	Language Setting	Maintenance	
	37	VDR			

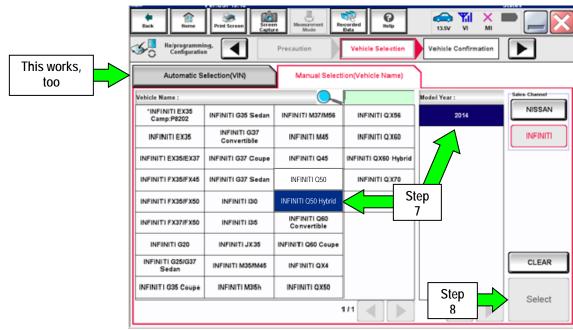
Figure A1

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

Back Rome Print Screen Cepture Monarce	ment Recorded Help	13.5V VI MI			
Re/programming, Configuration	Precaution	Vehicle Selection			
Precaution					
Operating suggestions for reprogramming, program Please review the all of precautions, and click the "C 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 repr					
-For ECU Configuration 1. Need to write the configuration data to new ECU 2. If writing the wrong configuration data, ECU can		right data.			
-For ECU Configuration using manual mode 1. Confirm the vehicle's spec and its configuration configuration data, ECU can not work. <u>Bio</u> 2. Operate the saving complete	Step the service m	nanual. If writing the wrong			
Confirmed instructions		1/1	Next		
	Elguro A2				

Figure A2

- 7. Select Q50 Hybrid and 2014, or Automatic Selection(VIN).
 - If Automatic Selection (VIN) is selected, or the screen in Figure A3 does not display, skip to step 9.



8. Select Select.

Figure A3

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

	Captare Captare Captare Captare Configuration	Image: Confirm the confirmation Image: Confirm the confirmation Confirm the confirmation Image: Confirm the confirmation Confirm the confirmation Image: Confirm the confirmation
Verify here	VIN or Chassis # Vehicle Name : Model Year	JN1 INFINITI O50 Hybrid 2014
		1/1 Change
		If OK, select Confirm

Figure A4

10. Select Confirm again.

Image: Back Image: Back	
Re/programming, Configuration Vehicle Confirmation Input VIN System Selection	4/6
Input VIN	
Enter the VIN number, and touch "Confirm". According to this operation, in case of specified operation that requires to save ECU information into CONSULT, VIN number you input is saved as file name. Therefore, confirm VIN number correctly.	
VIN (17 or 18 digits)	
Step 10	Confirm

Figure A5

11. Use the arrows to change pages, and then **select the correct control module** for configuration.

Make sure to configure the control modules in this order:

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

NOTE: DAST 1 and DAST 2 are shown in Figure A6; EPS/DAST 3 is not shown.

		514183					
Eack Arme Print Screen Capture	Moinsrement Bata						
Configuration	Input VIN System Sele	ction Operation Selection 5/6					
System Selection							
Touch "system". In case ECU you want to operate is not listed below, the vehicle or model year might be selected wrong.							
AVM	TRANSMISSION						
CHASSIS CONTROL		 ¬					
DAST 1	Step 11: See NOTE						
DAST 2		Change pages					
HIGH BEAM ASSIST		with arrows					
		212					
	—) • • •						

Figure A6

12. Select Manual Configuration.

·····			States
Back Home Print Screen Capture	Measurement Mode	Image: Provide state Image: Pr	
Re/programming, Configuration	stem Selection Operation	Selection	6/6
Operation Selection			
Touch "Operation". In case over write current ECU, touch "R In case replacement of ECU, select an ope		ory.	
Reprogramming	In case you want to reprograr	nming ECU, touch ''Rep	rogramming".
⊂ Replacement OF ECU			
Programming (Blank ECU)			
Programming	In case you want to Before replace ECU After replace ECU, 0 12	you should opera saved to CONSUL s ECU data and pr	т.
Read / Write Configuration	Manual Configura	touch "Manu	nas already replaced ECU, ial Configuration''.

- 13. Select (highlight) the correct DATA PART NO. (Use the page arrows as needed).
 - Use the table below to determine the correct DATA PART NO.
- 14. Select Next.

	Back Re/programming, Configuration Manual Configuration	tt Screen Capture Confirmation of Replace ECU	ed Peep 2.1V VI MI Manual Configuration	
	_	ving table which is equal to FAST(Servi Step 13: Select correct number	ce parts catalogue), then touch "Next".	
		DATA PART NO.		
		285H0 - 4GB4C	Channe	1
		Examples HO - 4GB4B	Change pages	
		285H0 - 4GB3E		Cancel
		285H0 - 4GF4C		Step
			1/2	
Q50 Hybrid	2WD With Active Lane Control	AWD With Active Lane Control	2WD Without Active Lane Control	AWD Without Active Lane Control
DAST1	28505 4GF3E	28505 4GF4A	28505 4GF4B	28505 4GF4C
DAST2	28505 4GF8E	28505 4GF9A	28505 4GF9B	28505 4GF9C
EPS/DAST3	285H0 4GF3E	285H0 4GF4A	285H0 4GF4B	285H0 4GF4C

NOTE: Vehicles with Active Lane Control will have a Lane Camera Unit mounted above the inside rearview mirror.

- 15. Confirm the **DATA PART NO.** is correct.
- 16. Select OK.

Back	Home	Print Screen	Screen Capture	Measurement Mode	Recorded Data	() Help		11.7V	Yil Vi	× MI		X		
\$ 0	Re/programmin Configuration	ng,		/lanual figuration	Write	Configurati	on	Prin Operati	t Result on Com			B/9		
Write Co	nfiguration													
Followi Confirm	ng setting va ı setting valu	lue for each e for each ite	item are sa ms, if OK, to	ved to vehicle ouch "OK" to	e ECU. save them	to vehicle	ECU.					0		
				DATA PART	'NO.	<u> </u>	Step							
				26505 = 404	=4A 🗸		15							
											Cancel			
													1	Ster
											ОК		4	Step 16
-														

Figure A9

- 17. Wait for Write Configuration to complete.
- 18. Select END.

	ver.csP20.11	2014			States	4
H Back	Home Print Screen Capture	Mesurement Mode	11.7V V			
1	Re/programming, Configuration Write	e Configuration Print Result / Operation Complet	e		9/9	
Print Res	ult / Operation Complete					
	configuration has been successful "End" to finish operation, and to ba	ly completed. ick to Home Screen. Confirm each fun	ction works correc	tly.		
	DAST 1				_	
		DATA PART NO.				
		28505 - 3 G 2 4, 3				
					Print	
					End	Step 18
		Είσυτο Δ10]

Figure A10

- 19. Repeat the configuration procedure in the correct order; DAST 2 (2nd), and then EPS/DAST 3 (3rd).
- 20. After all 3 DAST control modules have been configured, go to PART 3: Reprogramming Procedure on the next page.

PART 3: Reprogramming Procedure

NOTE: PART 3 must be performed 3 separate times to reprogram the control modules 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 synchronized (updated) with the current date.
 - 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>DAST may be damaged</u>.
- Be sure to turn OFF all vehicle electrical loads.
 If a vehicle electrical load remains ON, <u>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 <u>DAST may be damaged</u>.
- Turn off all external Bluetooth[®] devices (e.g., cell phones, printers, etc.) within range of the CONSULT PC and the plus VI. If Bluetooth[®] signal waves are within range of the CONSULT PC during reprogramming, reprogramming may be interrupted and <u>DAST may be damaged</u>.
- Connect the AC adapter to the CONSULT PC.
- 3. Turn ON the CONSULT PC, and then open 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. Check for stored DTCs in all systems 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. Check for stored DTCs.
 - If no DTCs found, go to step 6.
 - If any DTCs are found stored:
 - > Perform diagnosis and repairs related to the stored DTC(s), and then erase the DTC(s).
 - When completed, go to step 6.

NOTE: Make sure the ignition is not turned OFF between step 5 and step 6.

INFORMATION: If there are DTCs related to the Brake or Steering systems that are falsely stored and will not erase, perform the following:

- aa. Turn the ignition OFF.
- bb. Disconnect the 12V battery negative cable.
- cc. Wait 5 minutes.
- dd. Reconnect the negative battery cable.
- ee. Restart the SERVICE PROCEDURE from the beginning.
- 6. Go to Re/programming, Configuration.
 - a. Select the Home button and then YES to return to the screen shown in Figure 1.
 - b. Select **Re/programming**, **Configuration**.

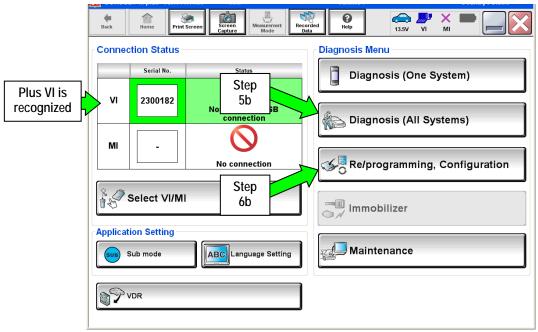


Figure 1

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

····			
	surement Recorded Hel		
Re/programming, Configuration	Precautio	n Vehicle Select	ion
Precaution			
Operating suggestions for reprogramming, progr Please review the all of precautions, and click the touch "Next".			. And
Caution: 1. Follow the operation guide displayed on scree 2. "Back" and "Home" button may not be used d			
-For reprogramming and programming 1. Install the latest version of the CONSULT-III plu CONSULT-III plus PC. 2. Preparation and read the service manual or re	, . .		is
-For ECU Configuration 1. Need to write the configuration data to new EC 2. If writing the wrong configuration data, ECU ca		the right data.	
-For ECU Configuration using manual mode 1. Confirm the vehicle's spec and its configuration configuration data, ECU can not work. Please 2. Operate the saving completely.	Step <mark>a the services of the se</mark>	ce manual. If writing the v	vrong
Confirmed instructions		1/1	Next
	Figure 2		

Figure 2

- 8. Select Q50 Hybrid and 2014, or Automatic Selection(VIN).
 - If Automatic Selection(VIN) is selected, or the screen in Figure 3 does not display, skip to step 10.
- 9. Select Select.

		101.0101-10.10				
	Back Borne	Print Screen Captu	n Measurement Re	corded Bota	13.9V VI MI	- <u>- X</u>
	Configuratio	ng.	Precaution	Vehicle Selection	Vehicle Confirmation	
This works, too	Automatic S	election(VIN)	Manual Select	ion(Vehicle Name)		
	Vehicle Name :				Model Year :	Sales Channel
	"INFINITI EX35 Camp:Pi8202	INFIINITI G35 Sedan	INFINITI M37/M56	INFINITI QX56	2014	NIS-SAN
	INFINITI EX35	INFINITI G37 Convertible	INFINITI M45	INFINITI QX60		INFINITI
	INFINITI EX35/EX37	INFINITI G37 Coup-e	INFINITI Q45	INFINITI QX60 Hybrid		
	INFINITI FX35/FX45	INFINITI G37 Sedan	INFINITI Q50	INFINITI QX70		
	INFINITI FX35/FX50	INFINITI 130	INFINITI Q50 Hybrid		tep	
	INFINITI FX37/FX50	INFINITI 135	INFINITI Q60 Convertible		8	
	INFINITI G20	INFINITI JX35	INFINITI Q60 Coupe			
	INFINITI G25/G37 Sedan	INFINITI M35/M45	INFINITI QX4]		CLEAR
	INFINITI G35 Coupe	INFINITI M35h	INFINITI QX50		Step	Select
				1/1	9	Select
1			=	-		

Figure 3

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

		20162
Back Borne Print Screen	Measurement Mode Networked	🚓 🏌 🗙 🖿 🔜 🔀
Ve	ticle Selection	
Please confirm selected information and touch "Change".	touch "Confirm". In case you want to s	elect another vehicle,
VIN or Chassis # Veri her		
Vehicle Name :	INFINITI Q50 Hyb	vrid
Model Year	2014	
		1/1
		Change
	lf	OK, select Confirm
1		

Figure 4

11. Select **Confirm** again.

Back	Home	Print Screen	Screen Capture		orded ata	() 11.8V		X I		
\$ 0	Re/programming, Configuration		Vehicle Co	nfirmation	Input VIN	System	Selecti	on		4/6
Input VIN	1									
Accord		ation, in cas	e of specified		requires to save ore, confirm VIN					
	월 武 아이라 또 또 한 아이라 또 해외 가 요구하 가 요구하 가 요구하 가 요구하 다 아이라 또 다 요구하 다 또 한 아이라 다 또 다 또 다 또 다 또 다 또 다 또 다 또 다 또 다 또 다 또	251-123456	NISSAY MOTO VSKJVWR51U O 1. 2. NYY NYY NY	0123456 第 0 第 0 第 0 第 1 第 2 第 2 第 2 第 2 第 2 第 2 第 2 第 2	AUJ3220123456 支払相告 支払相告 支払相告 支払相告 支払相告 支払相告 支払指載 本月日 本月た方 本月た方 本月た方	6				
VIN ((17 or 18 digits)	JIN 19	11/1 P1		14					
								1		
						St 1	-		Co	nfirm



12. Use the arrows to change pages, and then **select the correct control module** to be reprogrammed.

Make sure to reprogram the control modules 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.

second state of the		ocates
Back Reme Rest Screen Capture	Messarement Mode Recorded Data	P 💥 🖿 🔜 🔀
Configuration	Input VIN System Selection Operation S	election 5/6
System Selection		
Touch "system". In case ECU you want to operate is not list	ted below, the vehicle or model year might be selected w	rong.
AVM	TRANSMISSION	
CHASSIS CONTROL		
DAST 1	Step 12: See NOTE	
DAST 2	Change page	es
HIGH BEAM ASSIST	with arrows	5
		2/2
	Figure 6	

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

	Back Back					
	Operation Selection Touch "Operation". In case over write current ECU, touch "Reprogramming". In case replacement of ECU, select an operation in REPLACE ECU category.					
Step 13	REPROGRAMMING In case you want to reprogramming ECU, touch "Reprogramming". Reprogramming					
	Replacement OF ECU Programming (Blank ECU) In case you want to replace ECU, you should operate followings. Before replace ECU, ECU data is saved to CONSULT. After replace ECU, CONSULT writes ECU data and programming data.					
	VEHICLE CONFIGURATION Read / Write Configuration Manual Configuration					

Figure 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 (P/N). DAST 1 is shown; DAST 2 and DAST 3 are similar.

		States
Back Borne Print Screen Capture	Messarement Mode Recorded Data	
Configuration Operat	tion Selection Save ECU Data	717
Save ECU Data		
	e current part number as listed below to CONSULT. n by selecting suitable operation log. Operation log is erased	
File Label	JN1]
Operation	REPROGRAMMING	
System	DAST 1	
Part Number Current Pa	rt 28505.	
Vehicle	V37INFINITI Q50 Hybrid	
VIN	JN1	
Date	14C: If a match, select Save	Save
	Figure 8	

- B. Compare the P/N written down earlier to the P/Ns in the **CURRENT PART NUMBER** column of **Table A** below:
 - If there is a <u>match</u>, reprogramming <u>applies</u>. Continue with the reprogramming procedure.

NOTE: The software (current P/N) for the DAST Control Modules that were replaced earlier in this procedure should match the ones listed in **Table A**.

• If there is not a match, 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 reprogramming does not apply, or it has already been done.

Tab	le	Α
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MODEL	CONTROL MODULE	CURRENT PART NUMBER (P/N):
	DAST 1	28505 – 4GA1E
2014 Q50 Hybrid	DAST 2	28505 – 4GA6E
	EPS/DAST 3	285H0 – 4GA5E

C. If there is a P/N 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 arrows as needed). After reading, select **Confirmed instructions**, and then select **Next**.

Back Image: Print Screen Image: Scre	
Precaution	
Operating suggestions: If the reprogramming/programming is unsuccessful, ECU software may be damaged and ECU is no longe	
usable.	
Please review the all of precautions, and click the "Confirm" check box after confirming the its points.	
Precautions	
<before reprogramming="" starting=""> -Work preparation</before>	
1. Install the latest version of the reprogramming data to this CONSULT-III plus PC.	
2. Turn off any wireless devices such as mobile phones, cordless phones, transceivers, etc.	
-PC preparation 1. Close all other software except CONSULT-III plus and DO NOT activate any other software.	
2. Check that the screen saver is turned OFF. To do this, right-click on the PC Desktop, and select	
"Properties". Select the Screen Saver tab then select "(None)" from the Screen Saver pull-down menu, and click "OK".	
3. Operate the PC using the A/C adaptor to keep the battery charged.	
4. DO NOT disconnect the VI diagnosis data link cable during report/programming.	
-Vehicle preparation Step	
1. Adjust the battery charger output source of 12.0V to 12.0V battery is in the range of 12.0V to 13.5V. For EV, DO NOT charge of 12.0V to 15.00 km source of 12.0V to 15.	° <
2. Turn OFF all electrications and do y electrications witches.	
3. DO NOT the Defension of switch/Power switch. For EV/HEV, push power to the without depression of the pedal to set "power switch ON". (Ready lamp in the meter pedal to set "power switch ON".	te.)
Confirmed instructions 1/2	Next
Figure 0	

Figure 9

NOTE:

- In some cases, more than one new P/N for reprogramming is available.
 - ▶ If more then 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 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 module.

Back Re/programming, Configuration	tt Screen Screen Mode	Recorded Data Select Program Data	12.3V VI MI Confirm Vehicle Condition	9/11
Select Program Data				
	prog/programming data listed be mming data is listed below, confi in CONSULT.		l and	
System	DAST 1			
Current Part Number	Part Number After Repr	o/programming	Other Information	
XXXXX-XXXXX XXXXX-XXXXX	XXXXX-XXX) XXXXX-XXX		*****	
			0/0	Next

Figure 10

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

tack Arrow Print Screen Capture	Monserment Mode Recorded Data	-		
Configuration	recaution Select Program Data Confirm Vehicle Condition	9/11		
Select 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	28505			
Current Part Number	28505			
Vehicle	V37 INFINITI Q50 Hybrid			
VIN	JN1			
System	DAST 1			
Other Information	L53H_ST1	Re-select		
Expected time to finish re/programming	Verify P/Ns above, then select Next	Next		
	Figure 11			

17. If the screen in Figure 12 appears, first select **Delete**, then **Confirm**, and then **Other Operation**.

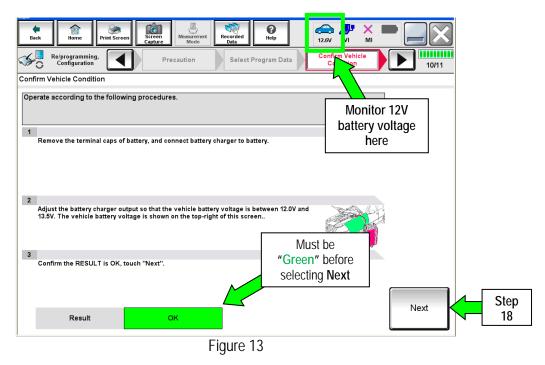
- This will erase the **Saved Data List** and restart the reprogram from step 12. You must go back to step 12.
- If no Saved Data List is stored, Figure 13 on the next page will be displayed.

ver.caris.iu	and the second		States	
Eack Rome Print Screen	Screen Capture Mode Data	d 🚱 🚑 🔑 🗙	-	
Configuration	Vehicle Confirmation	Operation Log Selection		
Operation Log Selection				
CONSULT has the saved data re In case you want to write the save data list (leff side), and confirm th want to do other operation, touch	e data from CONSULT to vehicle i e detail (right side). If the detail is	guration. ECU, touch and select the data in Save s OK, and touch "Confirm". In case you		
Saved Data List	Saved Data Detail	1		
JN1BV7AP2EM	Operation	REPROGRAMMING		
	System	DAST 1		
	Part Number	285H0		
	Vehicle	INFINITI Q50 Hybrid	Delete	Ì
	VIN	JN1	Other	
	Saved Date	8:37:38 AM	Operation	Step 17
1/1	→]	1/1	Confirm]

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.



- 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.

						States
Back Borne Print Screen	Screen Capture	Recorde Data	d 🚱	12.1V	M × 1	
Configuration	Select Progra	im Data	Confirm Vehicle Condition	Transf	➣	10/11
Confirm Vehicle Condition						
Confirm the vehicle condition as I Then, confirm that judgment for all out of range, reprogramming or pro	items indicate	OK, and touch '		hicle condi		nitor 12V ery voltage here
Montor ten	Value	Unit	Judgment	Con	dtion	
BATTERY VOLTAGE	12.0	v	ок]
			[Step 19		Start

Figure 14

IMPORTANT: Until the reprogramming has completed:

- <u>Do not touch the Home button until instructed to</u>.
- When the plus VI is transferring the reprogram to the DAST control module, do not disconnect the plus VI from the vehicle even if the PC freezes.
- If you need 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 reprogram writing to the vehicle, the DAST control module that is being reprogrammed may need to be replaced. Refer to **Control Unit Recovery** on the next page.
- 20. Wait for both bar graphs to complete.

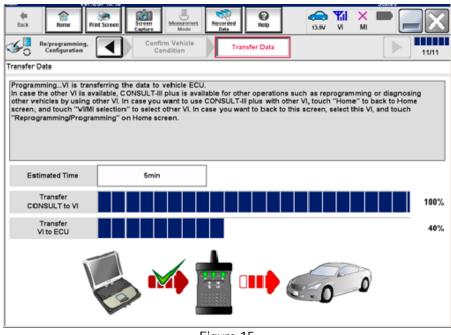


Figure 15

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 as shown in 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 module" but without Error Code "12-1-1NR", replace only the DAST control module that is currently being reprogrammed, and then reprogram to the most current software.
- If the reprogramming does not complete, refer to **Control Unit Recovery** on the next page.

NOTE: If a DAST control module replacement is required:

- Refer to the appropriate section of the ESM for the procedure to replace and configure a DAST control module.
- Make sure to write the correct configuration to the new control module.

Do not disconnect the 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</u> <u>first attempt and can be selected</u> <u>more than once</u>.

	Mode Data 12.3V VI MI	
Configuration	Data Confirm Result	3/3
onfirm Result		
Reprogramming or programming is not complete operation on this ECU. Fouch "Retry" to retry reprogramming or program	id properfy, but you can retry reprog/programming	
Part number after Reprog/programming	28505-	
Current Part Number	28505-	
Vehicle	Select Retry if Error	
VIN	Code 12-1-1-NR is	
System	present.	-
Date		Retry
Other Information	L53H_ST2	
Error Code	12.1.1.NR	Print

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.

Rolprogramiag.	constar Data	
C configition		9/5
Reprogramming is not completed property. Print this screen as needed. Confirm CONS vith precedure. Restart CONSULT with disconnecting VI or	SULT version, IGN/Power switch position, shift position and etc noe, and start the reprogramming again.	
Part number after Reprog/programming	284E2-XXXXX	
Current part number	284B2-XXXXX	
Vehicle	icle QASHQAI	
	XXXXXXXXXXXXX	
/IN	^^^^	
	всм	
iysten		-
vile System Date	BCM	-

Figure 17

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

Back Bit Mone Print Screen Bit Mode Bit Mode	VI MI
Confirm Result	
Reprogramming or programming is completed. Touch "Next" to continue operation.	
Ste 22	2 Next

Figure 18

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

			Veniore :		oounity : o.o.n.
B	ack Home Print Screen	Screen Capture	Recorded Help		x 🗭 📃 🔀
Ś	Re/programming, Configuration	Confirm Result	Erase All DTCs	Print Result / Operation Comple	te 13/14
Eras	e All DTCs				
Aco	cording to the instruction below	ı, erase All DTCs.			
1	Turn the ignition switch to the C	FF position			
	Turn ignition switch OFF positi				DFF
	Current status of ignition switch	OFF		N to DFF	
			`		
		F	Figure 19		

- b. Turn the ignition ON (engine OFF / Not Ready).
 - The screen in Figure 20 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.

Ba		
Ś	Re/programming, Configuration Comfirm Result Confirm Result Confirm Result	
Erase	All DTCs	
	ording to the instruction below, erase All DTCs.	
1	Turn the ignition switch to the OFF position.)
	Current status of ignition switch	
	Figure 20	

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

_		ver.CSP19.10				_		Stat	85
de Back	Home	Print Screen	Screen Capture	Mossurement Mode	Recorded Data	O Help	13.6V VI	× -	
%	Re/programmin Configuration	*	Confi	rm Result	Erat	e All DTCs	Print Resu Operation Cor	lt <i>l</i> nplete	13/14
Erase All	DTCs								
1 Tur	n ignition swite Step 24c Current statu swit ne current sta	eRASE ch to s of i tus c		'NEXT" to g	o to the nex	t screen.			ON
							Step 24d		Next

Figure 21

- 25. Verify the P/N has changed (before and after reprogramming P/Ns 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**.

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Back Borne Print Screen Capture	Measurement Mode Becorded Data	13.5V VI M	: 🖿 📃 🔀
Configuration	Print Result / Operation Complete		14/14
Print Result / Operation Complete			
All tasks are completed. Confirm LAN acce on case Console I can NOT immediately ac- temporally storage of this page. Touch "Sc Data Folder" on desk top, and open the fold	cess to LAN or printer, Screen Capture i reen Capture", and save it. Screen captu	function is available fo	
	Step 28505		
Part number before Reprog/programming	25 28505		
Vehicle	V37 INFINITI Q50 Hy	brid	
VIN	JN1I [_	_ Step 25a	<u> </u>
System	DAST 1		Print
Date	9:14:12	2 AM	
		Step 25c	Confirm

Figure 22

26. After Confirmation has completed, select Home.

Back Home Print Screen	Screen Capture	Recorded Data	12.5V VI	X I	🔀
Re/programming, Configuration	Erase All DTCs	Print Result / Operation Complete			14/14
Print Result / Operation Complete					
All tasks are completed.	Î.				· · · ·
In case CONSULT can Not temporally storage of this Data Folder" on desk top.	"Complete Operation" & backing Home once. In necessary document, to	case "Complete Operat	tion" Screen is	for IS	
Reprog/programming					
Part number before Reprog/programming Vehicle					
VIN System	Home	Canc	el	_	Print
Date		1/11/2012 2:04:13	PM		
	Step 26		1/1		Confirm
	Fic	gure 23			

- riguro 20
- 27. Repeat the entire reprogramming procedure for DAST 2.
- 28. Repeat the entire reprogramming procedure for EPS/DAST 3.

After all three reprograms (DAST 1, DAST 2, and EPS/DAST 3) are complete, go to step 29 on the next page.

- 29. Check for DTCs in DAST 1, DAST 2, and EPS/DAST 3.
 - a. Open C-III plus, select **Diagnosis (All Systems)**, and then select **Confirm**.
 - b. Wait for System Call to complete.
 - c. Check for stored DTCs.
 - If no DTCs are stored, go to **PART 4** on the next page.
 - If C13C0 or C13C2 are stored in DAST 1 or DAST 2, go to DAST DTCs on page 33.
 - If DTC C13F2 is stored in DAST 1, DAST 2, or DAST 3 as current:
 - > Then, at least one of the DAST control modules did not complete the reprogramming correctly.
 - > Perform reprogramming again for the DAST control module that <u>Does Not</u> have this DTC.
 - If only DTCs other than the ones listed above are stored, erase DTCs and go to **PART 4** on the next page.

NOTE: If a DAST control module replacement is required:

- Refer to the appropriate section of the ESM for the procedure to replace and configure a DAST control module.
- Make sure to write the correct configuration to the new control module.

PART 4: Calibration and Confirmation Procedures

NOTE: PART 4 includes the following:

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

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.
- 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.
- 2. Make sure the AC adapter is still connected to the CONSULT PC.

- 3. Turn the ignition ON (engine OFF / Not Ready).
 - **IMPORTANT**: Do Not start the engine (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.

Back Print Screen Screen Mone Diagnesis (All System) Select Vehicle Conf	rt Recorded Dea firm Vehicle Diagnosis (All Diagnosis (All
Result Data Monitor	
Test Item DAST CALIBRATION (MODE1)	Step 5
DAST CALIBRATION (MODE2)	
	Step 6 Start
	Figure 24

- 6. Select START, and then select 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 33.

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

IMPORTANT: The steering wheel must be positioned in the neutral (straight ahead) position, for step 7 above, to ensure that the steering wheel will be centered when driving straight.

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.

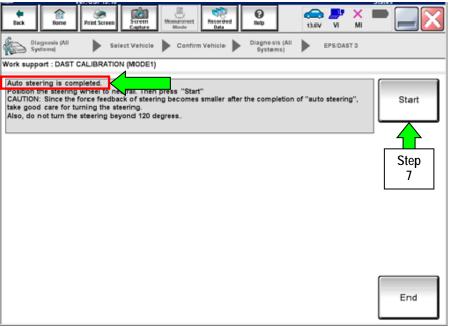


Figure 25

8. Select End.

VICESIESU Bane Print Screen Screen Massarene Diagnosis (All Screens) Select Vehicle Con	nt Recorded Resp Base firm Vehicle Diagnosis (All Systems)	13.6V VI MI	-
Work support : DAST CALIBRATION (MODE1)	,	-	
"DAST CALIBRATION (MODE1)" is completed. NOTE: "OFF-CENTER" is not used.			Start
MONITOR]
OFF-CENTER	0	deg]
		Step 8	End

Figure 26

- 9. Turn the ignition switch OFF.
- 10. With 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 the steering angle sensor.

- ver.comis.iu		States
Back Borne Print Screen	een tare Monte Recorded Note	🚓 🚚 🗙 🖿 🔛 🔀
Diagnosis (All Systems) Select Ve	hicle Confirm Vehicle Diagnosis Systems	(All ABS
Work support : ST ANGLE SENSOR ADJ	USTMENT	
TOUCH 'START', AFTER KEEP THAT TH STRAIGHT-AHEAD.	HE STEERING WHEEL IS IN THE NEUTRAL	POSITION WHEN DRIVING
Current status		/aiting for your operation Step 2
		Step 3

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.
- 5. Disconnect the battery charger from the vehicle 12V battery.
- 6. Go to **Self-Diagnosis Check** on the next page.

SELF-DIAGNOSIS Check

- 1. Place the vehicle in READY mode (turn ignition ON <u>with</u> 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.

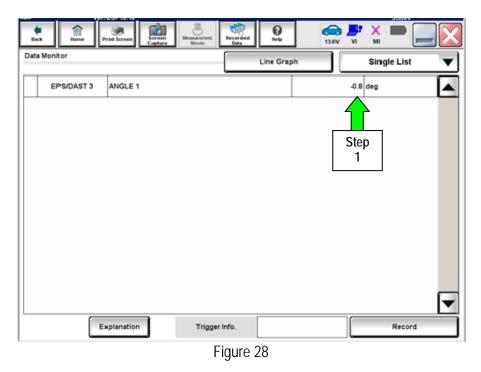
IMPORTANT: <u>Do Not</u> drive the vehicle.

CONFIRMATION of EPS/DAST 3 ANGLE 1

NOTE: At this point the ignition should still be ON with the 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



2. Go to PART 5: Calibrate AVM Camera Image on the next page.

PART 5: Calibrate AVM Camera Image

- 1. Perform the procedure for AVM Camera Calibration.
 - Refer to the Service Manual > Section AV (Audio, Visual & Navigation System) > Calibration Camera Image (Around View Monitor).

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 module for **DAST 2**.
 - If DTCs cannot 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 module for DAST 1.
 - If DTCs cannot 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 are still no DTCs stored/listed, replace the control module for DAST 3.

NOTE: If a DAST control module replacement is required:

- Refer to the appropriate section of the ESM for the procedure to replace and configure a DAST control module.
- Make sure to write the correct configuration to the new control module.

INFORMATION: If DTCs other than the ones listed above are stored and will not erase, do the following:

- a. Turn the ignition OFF.
- b. Disconnect the 12V battery negative cable.
- c. Wait 5 minutes.
- d. Reconnect the negative battery cable.
- e. Return to where you were in the Service Procedure.

PARTS INFORMATION

DESCRIPTION	PART #	QUANTITY
DAST 1 Control Module (Steering Angle Main Control Module)	28505-4GA1E	1
DAST 2 Control Module (Steering Angle Sub Control Module)	28505-4GA6E	1
EPS/DAST 3 Control Module (Steering Force Control Module)	285H0-4GA5E	1

CLAIMS INFORMATION

Submit a Campaign (CM) line claim using the following claims coding:

CAMPAIGN ("CM") I.D.	DESCRIPTION	OP CODE	FRT
R1613	DAST Replace Modules, Reprogram, Recalibrate, & Adjust AVM	R16130	3.4 hrs.