

Classification:

ST14-007

Reference:

ITB14-019

Date:

April 25, 2014

2014 Q50; VDC ACTIVATES WHEN IT IS NOT NEEDED

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

IF YOU CONFIRM:

While driving, the Vehicle Dynamic Control (VDC) activates when conditions do not call for VDC activation (VDC activation is not needed).

NOTE: If the above condition should occur, you will see the VDC warning light flash and you will hear a mechanical noise like Anti-Lock Brake (ABS) activation.

ACTION:

1. Check F/B ANGLE 2 in EPS/DAST3.
2. If needed, perform Calibration and Confirmation Procedure.

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

PART 1: Check F/B ANGLE 2

1. Connect CONSULT-III plus (C-III plus) to the vehicle.
2. Turn the ignition ON.
3. Open/start C-III plus and navigate to:

Diagnosis (OneSystem) >> EPS/DAST3 >> Data Monitor >> F/B ANGLE 2.

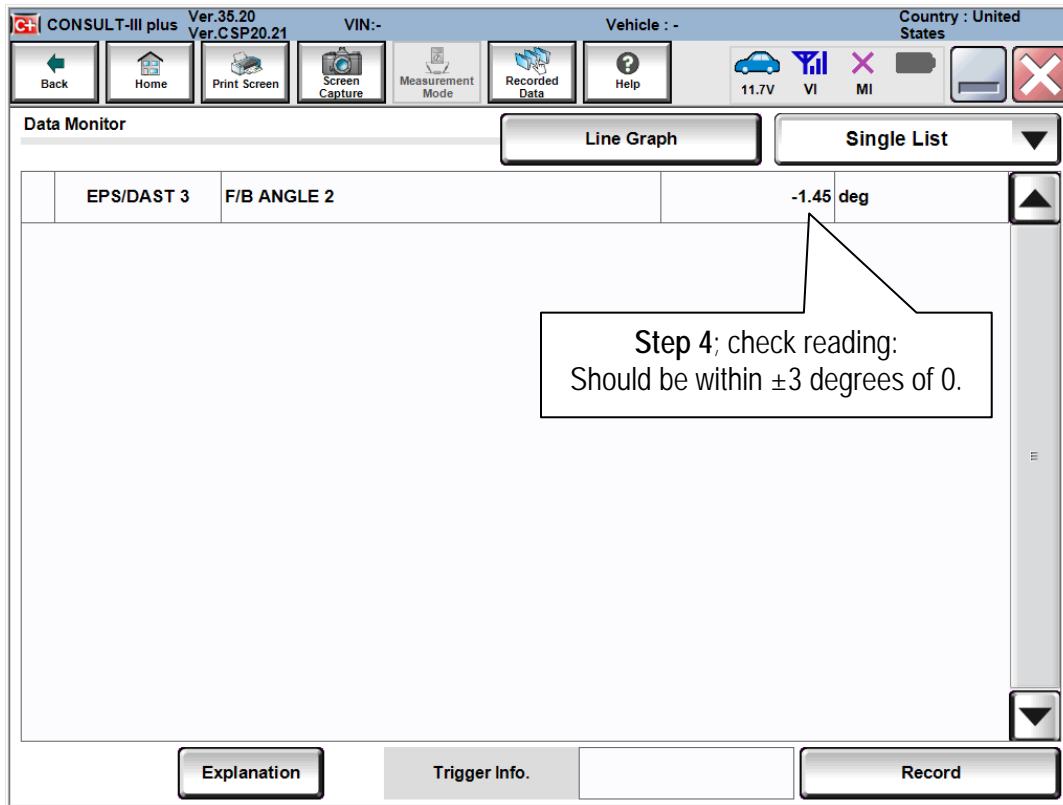
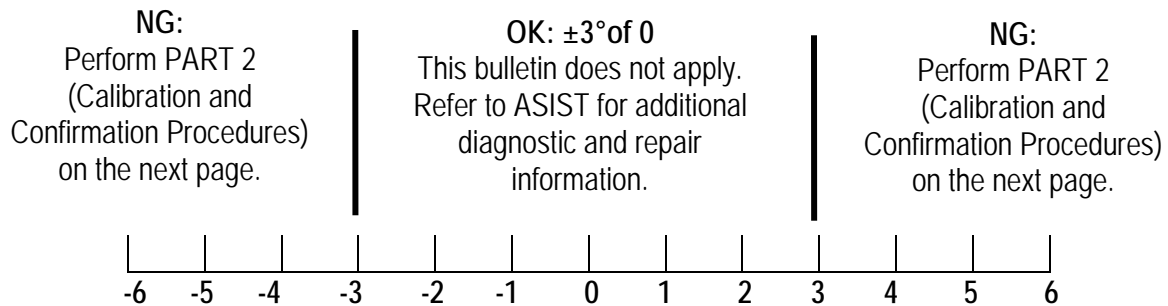


Figure 1

4. Check F/B ANGLE 2 reading:



PART 2: Calibration and Confirmation Procedures

NOTE: PART 2 includes DAST CALIBRATION (MODE1) and ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION.

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: Be careful of moving parts. 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.
- Connect a battery charger to the vehicle battery set to a low charge rate.

NOTE: This calibration procedure will be performed twice completely through.

IMPORTANT: Do Not turn the ignition OFF at the end of the second time through.

1. Make sure the plus VI is connected to the vehicle.
2. Connect the AC adapter to the CONSULT PC.

3. Turn the ignition ON (engine OFF / Ready light OFF).
 - **IMPORTANT:** Do Not start the engine (for Hybrid models the READY light must be OFF).
4. Turn ON the CONSULT PC, and start C-III plus.
5. Select **Diagnosis (All Systems)** and Erase all DTCs.
6. Navigate C-III plus to **EPS/DAST 3 >> Work support >> DAST CALIBRATION (MODE1)**. See Figure 2.

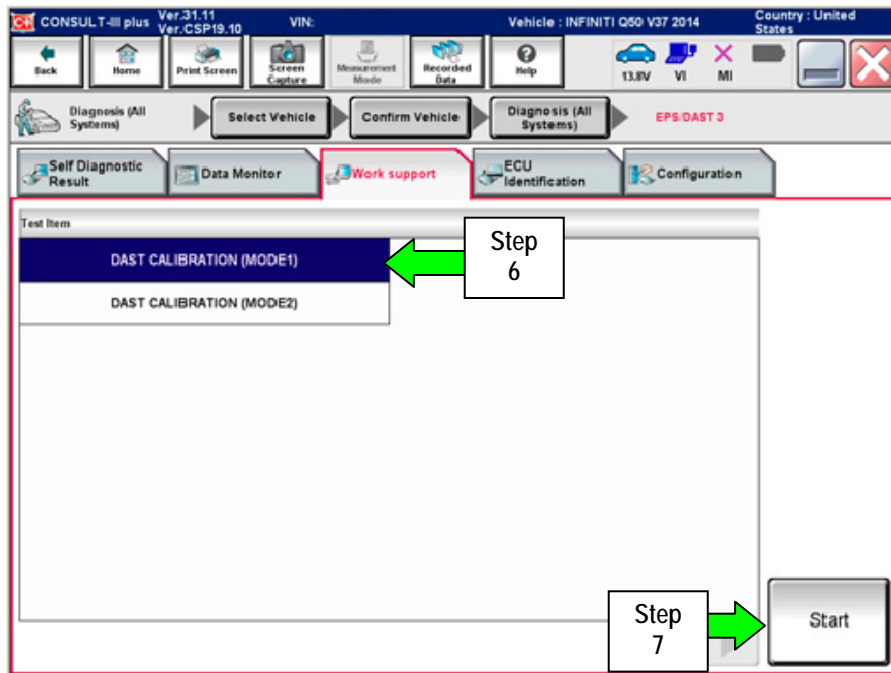


Figure 2

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

WARNING: Be careful of moving parts. 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 the Electronic Service Manual for additional diagnostic and repair information.

- When Auto steering has completed, center the steering wheel to the neutral (straight ahead) position, and then select **Start** again (see Figure 3).

IMPORTANT: The steering wheel must be positioned in the neutral (straight ahead) position for step 8 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.**

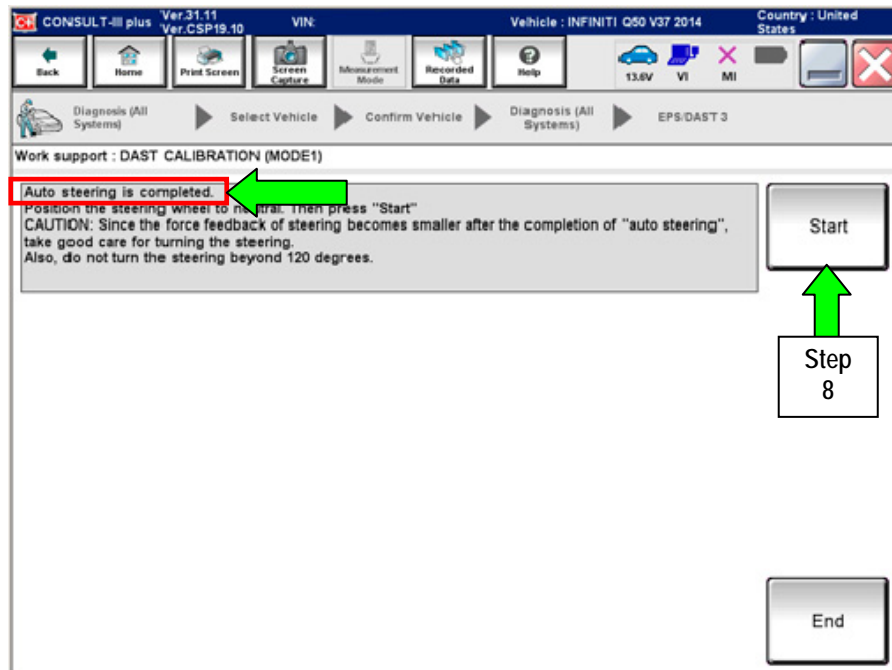


Figure 3

9. Select End.

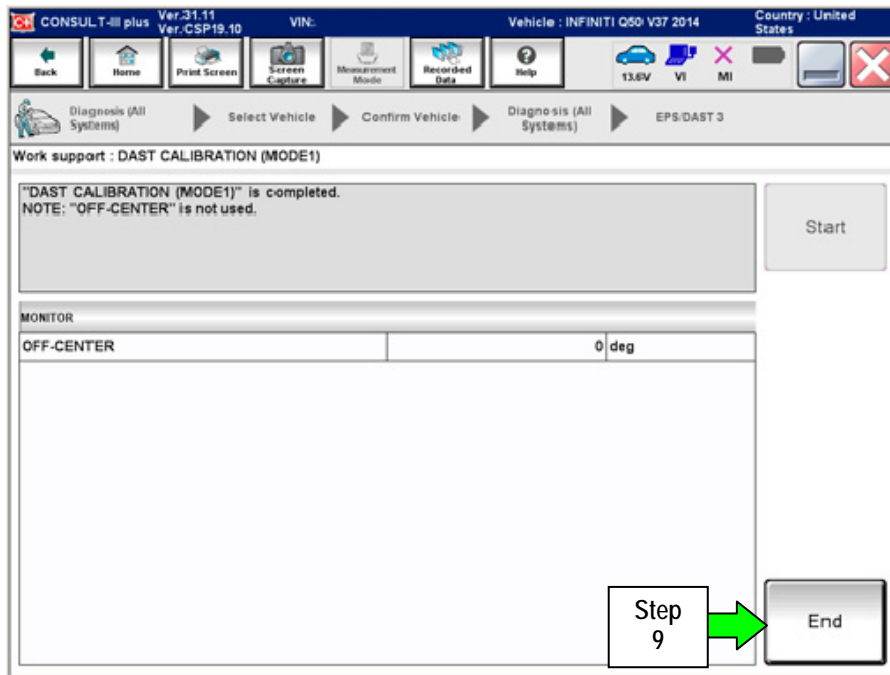


Figure 26

10. Turn the ignition OFF.

11. With the C-III plus still connected, repeat steps 1-9 a second time, but **Do Not** turn the ignition OFF after step 9, and then proceed to step 12.

12. 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:

- **Do Not** 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) must be started over from step 1.
- Do Not touch the steering wheel until ADJUSTMENT OF STEERING ANGLE NEUTRAL POSITION (on the next page) is finished.

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: Do Not touch the steering wheel while performing ST Angle Sensor Adjustment.

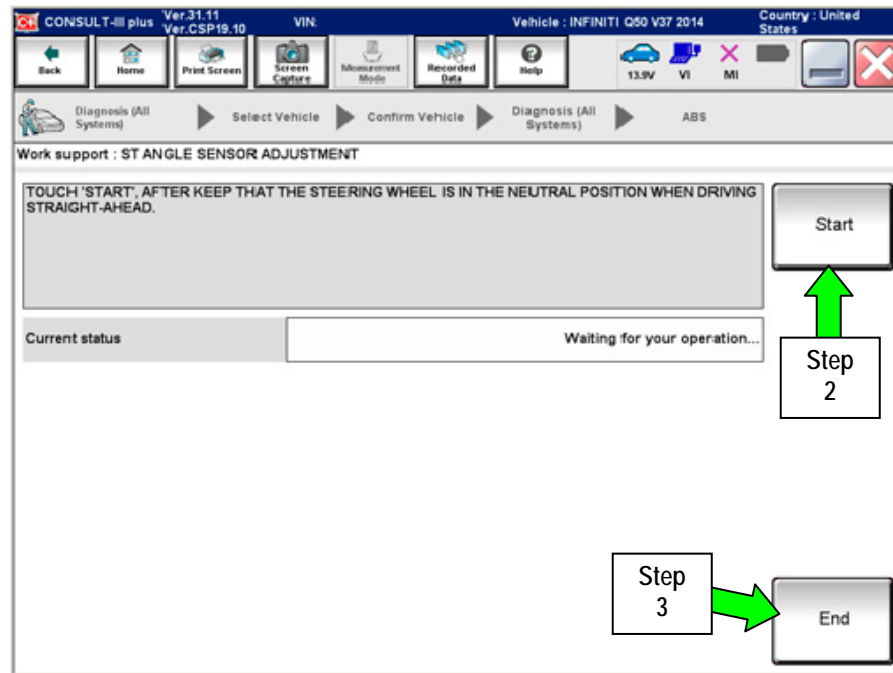


Figure 4

3. When the message **COMPLETE** is shown (after approximately 5 seconds), select **End**.
4. Turn the ignition OFF.
5. Disconnect the battery charger from the vehicle 12V battery.
6. Test drive the vehicle and make sure the issue is fixed.

CLAIMS INFORMATION

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

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Calibrate & Adjust Steering Angle Sensor	(1) (2)	QX30AA	ZE	32	0.7

(1) Refer to the electronic parts catalog (FAST) and use the (controller assy –power steering, column) part number (285H0 – xxxx) as the Primary Failed Part (PFP).

(2) No other diagnostic procedures subsequently required. Do NOT claim any diagnostic OP Codes with this claim.