

File in Section: -

Bulletin No.: PI0800D

Date: December, 2014

## PRELIMINARY INFORMATION

Subject: DTC C0544 and/or U0415 Set and Will Not Clear, Malfunction Indicator Lamp (MIL) On

Models: 2013 Buick LaCrosse, Regal (RPO NJ1)

2012 Chevrolet Volt Built After VIN Breakpoint CU119678

2013 Chevrolet Equinox

2013 Chevrolet Malibu (RPO NJ1)

2013 GMC Terrain

**Equipped with Electric Power Steering** 

This PI has been revised to update step 7. Please discard PI0800C.

## Condition/Concern

Some customers may comment on a Malfunction Indicator Lamp (MIL) on and a drop in power steering assistance. Technicians may find DTC C0544 with fault byte 5A and/or DTC U0415 with fault byte 75 set that does not clear.

DTC C0544 with fault byte 5A and/or DTC U0415 with fault byte 75 sets and does not clear if the Steering Angle Sensor alignment procedure is performed incorrectly. If the car is driven in this condition, as speed increases the driver will experience the car attempting to steer to the left or right (depending how which offset to left or right was set during the alignment procedure).

While steering at low speeds (parking lot), the driver will experience power steering assist for only a fraction of a turn left or right (dependent on offset) and a drop in power steering assist (full manual steering).

## Recommendation/Instructions

To clear the DTC(s), it will be necessary to flash the Electric Power Steering Control Module (EPS) to a different software.

- Identify DTC C0544 DTC with fault byte 5A and/or DTC U0415 with fault byte 75 is set.
- Try to clear the DTC(s) with the service diagnostic tool.
- Confirm DTC C0544 and/or DTC U0415 is still set as current.

To reprogram the Electric Power Steering Control Module (EPS), follow the procedure below:

- 1. Verify the battery voltage is more than 12 volts but less than 16 volts before proceeding with reprogramming. The battery must be fully charged **BEFORE** reprogramming a control module.
- 2. During reprogramming, the battery voltage must be maintained within the proper range of 12-15.5 volts. **CONNECT** the approved Midtronics® PSC 550 Battery Maintainer (SPS Programming Support Tool (EL-49642) to the vehicle or the GR8 (EL50313) in the power supply mode.

Notice: It is essential that the TIS terminal, MDI, Tech 2® and/or Scan Tool are updated with the latest software available.

- 3. Verify that the devices being used are updated with the latest available software version **BEFORE** beginning the reprogramming event.
- 4. **BEFORE** beginning reprogramming you **MUST** refer to **Control Module References** in SI for the appropriate Programming and Setup procedures.
- 5. If a wireless connection will be used for reprogramming, a secure service department connection **MUST** be used. **DO NOT** use any public WiFi connection from the customer lounge.
- 6. Reprogram the Electric Power Steering Control Module with the special VCI number provided by the Techline Customer Support Center (TCSC). Contact TCSC for instructions. Use Service Programming System (SPS) with the latest calibrations available on TIS2WEB. Refer to the SPS procedures in SI.
- 7. When the Electric Power Steering Control Module (EPS) VCI reprogramming is complete, clear codes, key off ignition, open and close door and allow vehicle's network bus to go to sleep (wait 3 minutes).

- 8. Place ignition into Run (engine not running) power mode.
- 9. Reprogram the Electric Power Steering Control Module (EPS) again using Service Programming System (SPS), selecting "Replace and Reprogram" then selecting EPS programming in Support Controllers.
- 10. After reprogramming is completed, key off ignition, open and close door, allow vehicle's network bus to go to sleep (wait 3 minutes).
- 11. Start the car.
- 12. Perform the steering angle sensor centering and steering endstop learn procedure. Refer to the Steering Angle Sensor Centering and Software Endstop Learning within Power Steering Control Module Calibration in SI.
- 13. Turn off the vehicle and let the Electric Power Steering Control Module (EPS) go to sleep (3 minutes).
- 14. Start the vehicle and perform a diagnostics check. The DTC C0544 and/or DTC U0415 should no longer appear.
- 15. Test drive the vehicle.

## **Warranty Information**

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
2880038*	Reprogram Electric Power Steering Control Module (EPS)	1.0 hr
*This is a unique Labor Operation for Bulletin use only. It will not be published in the Labor Time Guide.		